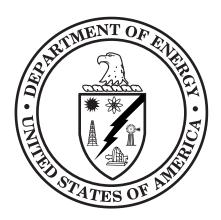


U.S. Department of Energy

# 2003 National Science Bowl® May 1–5, 2003



## U.S. Department of Energy National Science Bowl®

The National Science Bowl® is a highly regarded educational event and academic competition among teams of high school students who attend science and technology seminars, design, build and race hydrogen fuel cell model cars, and compete in a verbal forum to solve technical problems and answer questions in all branches of science and mathematics. The competition encourages students to become involved in mathematics and science activities and become serious students through extensive preparation for the Science Bowl events. Since the program began in 1991, it has brought together more than 90,000 high school science and mathematics students—as well as their teachers—from across the country. The program is designed to encourage students and their teachers to achieve educational excellence in the sciences. The U.S. Department of Energy (DOE) is proud to be the sponsor of the National Science Bowl®.

Competing teams are quizzed on scientific topics in biology, chemistry, physics, astronomy, earth science, general science, and mathematics. Each team is composed of four students, one alternate student, and a teacher who serves as an advisor and coach.

Regional elimination tournaments are held from January through March at DOE laboratories and facilities, other Federal agencies, and educational institutions throughout the country. This year, 66 high school teams from 39 states, the District of Columbia, and the U.S. Virgin Islands have competed in regional competitions and have qualified to participate in the 2003 National Science Bowl® in Washington, DC.

# 2003 National Science Bowl® Table of Contents

Science Bowl Alumni Officials	ix
Map of Participating Facilities and Winning Teams	X
SCHOOL BIOGRAPHIES	
A & M Consolidated High School, College Station, TX	1
Academy for the Advancement of Science and Technology, Hackensack, NJ	
Albany High School, Albany, CA	3
Antilles School, St. Thomas, Virgin Islands	4
Apollo High School, Owensboro, KY	5
Arcadia High School, Arcadia, CA	6
Arrowhead High School, Hartland, WI	7
Benjamin Banneker Academic High School, Washington, DC	8
Bishop Kelly High School, Boise, ID	9
Booker T. Washington High School, Tulsa, OK	10
C. Leon King High School, Tampa, FL	11
C.M. Russell High School, Great Falls, MT	12
Campbell County High School, Gillette, WY	13
Centerville High School, Centerville, OH	14
Chaska High School, Chaska, MN	15
Cincinnati Country Day School, Cincinnati, OH	16
Community School, Sun Valley, ID	17
Cookeville High School, Cookeville, TN	18
Dickinson High School, Dickinson, ND	19
Dunbar High School, Fort Worth, TX	20
Edmond Home School Co-op, Oklahoma City, OK	21
Edward W. Clark High School, Las Vegas, NV	22
Eight Mile School District, Trenton, ND	23
Eldorado High School, Albuquerque, NM	24
Enterprise High School, Redding, CA	25
Great Neck South High School, Great Neck, NY	26
Highland High School, Bakersfield, CA	27
Kennewick High School, Kennewick, WA	28
Lakeside High School, Evans, GA	29
Lexington High School, Lexington, MA	30
Louisiana School for Math, Science and Arts, Natchitoches, LA	31
Lynbrook High School, San Jose, CA	32
Maui High School, Kahului, HI	33

#### SCIENCE TO THE CORE

Milby High School, Houston, TX	34
Mira Loma High School, Sacramento, CA	35
Mississippi School for Math & Science, Columbus, MS	36
Montgomery Blair High School, Silver Spring, MD	37
Morgantown High School, Morgantown, WV	38
Mountain View High School, Mesa, AZ	39
Newton North High School, Newton, MA	40
New Trier High School, Winnetka, IL	41
Niceville High School, Niceville, FL	42
NOBCChE San Diego, San Diego, CA	43
North Hollywood High School, North Hollywood, CA	44
Oregon Episcopal School, Portland, OR	45
Parkview High School, Lilburn, GA	46
Pembroke Hill School, Kansas City, MO	47
Peter Johansen High School, Modesto, CA	
Poudre High School, Fort Collins, CO	49
Pullman High School, Pullman, WA	50
Randolph School, Huntsville, AL	51
Renaissance High School, Detroit, MI	52
Saratoga Springs High School, Saratoga Springs, NY	53
Sault Area High School, Sault Ste. Marie, MI	54
Shawnee Mission South High School, Overland Park, KS	
Smoky Hill High School, Aurora, CO	56
Soda Springs High School, Soda Springs, ID	57
Southside High School, Fort Smith, AR	58
Stevens High School, Rapid City, SD	59
Taylor Allderdice High School, Pittsburgh, PA	60
Thomas Jefferson High School For Science & Technology, Alexandria, VA	61
W.G. Enloe High School, Raleigh, NC	62
Washington High School, Cedar Rapids, IA	63
West Chester East High School, West Chester, PA	64
Wichita High School East, Wichita, KS	65
Woodinville High School, Woodinville, WA	66

#### Science Bowl Alumni Officials

Craig Michael Alpert is a freshman at Harvard and went to Taylor Allderdice High School in Pittsburgh, Pennsylvania. He plans to be a biochemistry concentrator, but he is also interested in foreign languages, economics, and history. He competed in the National Science Bowl® last year as a senior in high school. This summer he will be working at the Center for Genomic Sciences in Pittsburgh.

Maria Catilo came to the National Science Bowl® in 1998 with T.C. Williams High School in Alexandria, Virginia. She graduated in 2002 from Harvard University with a Bachelor of Arts in Biological Anthropology. Currently, she is a Research Assistant in the Reproductive Ecology Laboratory, Department of Anthropology at Harvard, which is the same lab where she completed her senior honors thesis. Maria is working on a large collaborative study that is exploring how lifestyle factors, such as exercise, workload, and nutrition, affect ovarian function, and how such relationships can be applied to practically mediate breast cancer risk.

Brent Cezairliyan grew up in Maryland, representing Thomas Wootton High School in the 1996 National Science Bowl<sup>®</sup>. He majored in biophysics at Brown University. After college, he worked as a computational biologist for a year, then started graduate school in the department of biology at MIT where he studies protein folding and degradation.

**Douglas Fuller** is a graduate student in computer science at Iowa State University and he does research in high-performance computing for Ames Laboratory.

Joshua Gutman is a freshman at the California Institute of Technology studying computer science. He went to Santa Monica High School for all four years of high school. He plays intercollegiate tennis and also spent some time playing basketball. He enjoys studying astronomy and mathematics.

Dean Jens competed for Ankeny (IA) High School in the first three Science Bowls in 1991-1993; his team placed second in the region in 1991, but made it to the national tournament in 1992 and 1993, placing second in 1993. He then earned a bachelor's degree in math and physics from the University of Chicago and a master's in physics from Princeton University before leaving the academic world. He has since been a developer of computer programs that send and receive financial market data over networks.

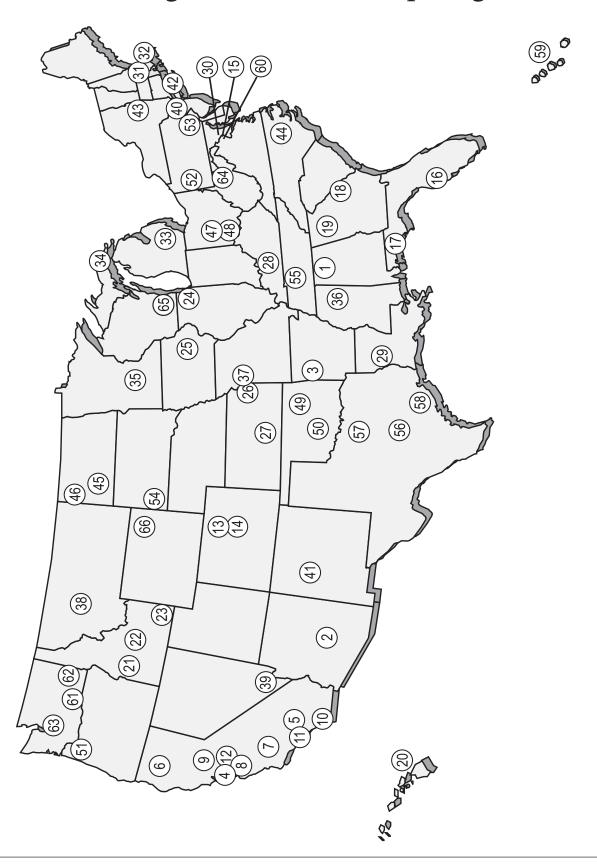
Adam Matthews graduated from Harvard College with an A.B. in Biochemical Sciences, and is currently a second-year graduate student in the Harvard University Immunology Program. He was born in Boston and raised in Honolulu, where he went to the National Science Bowl® in 1995 and 1997 with the Punahou High School team. He has done research with several NSF programs, and won a HHMI Predoctoral Fellowship in Biological Sciences in 2001. In high school, he received the Bausch & Lomb Science Award, National Merit Scholar, Tandy Technology Scholar, and Best in Category Award in Biochemistry at the Intel International Science and Engineering Fair.

Alex Meyer attended Bakersfield High School and won the regional science bowl in 1998. In college, he studied chemical engineering at Carnegie Mellon University in Pittsburgh, PA. At CMU, he was a representative on his department's student advisory council and treasurer for the AIChE student chapter. He did research on the polymerization of rod-like micelles during his junior and senior years with Dr. Lynn Walker. He graduated with honors in 2002 and was awarded the Ken Westerberg Award for excellence in chemical engineering research. Currently, he is a first-year Ph.D. student in a chemical engineering at the University of Delaware, and works with Dr. Eric Furst in the area of microrheology of dense colloidal suspensions.

Derek Shannon attended the 1997 and 1998 National Science Bowls® representing Minot High School in Minot, North Dakota, where his team reached the quarter-finals its second year. Derek received his B.S. in Geobiology from Caltech in June, 2002, and is now a grad student in astrobiology at the University of Southern California. He has worked with Mars Global Surveyor data on the Martian southern polar region, investigated the possibly biological origin of magnetite crystals in the Allan Hills Mars meteorite, and participated in human Mars mission simulations in the Utah desert. At USC, Derek applies infrared mapping from NASA's Mars 2001 Odyssey spacecraft to the search for life on the Red Planet.

Peter Williams went to the National Science Bowl® in 2001 with the Newton North Science Team from Newton, Massachusetts. After narrowly losing in the 2002 New England Regionals ("Y" is now his least favorite letter), he decided to take an easier route to Nationals by volunteering for the DOE. He's currently studying physics and doing research on gamma ray bursts as a freshman at Harvard.

## 2003 National Science Bowl® Regional Winning Teams and Participating Facilities



## Alabama

1. Randolph School - Alabama School of Math & Science

2. Mountain View High School - WAPA Desert SW Regional

# Arkansas

Southside High School – Russellville School District Arkansas Tech University

- 4. Albany High School U.S. DOE Oakland Operations
- Arcadia High School NASA Jet Propulsion Laboratory 2
- Enterprise High School City of Redding Electric Utility 9
  - Highland High School CA State University
  - Lynbrook High School Sandia National Laboratories
- Mira Loma High School WAPA Sierra Nevada Region NOBCChE San Diego – NOBCChE – San Diego Chapter
  - 11. North Hollywood High School Los Angeles Dept. of
- 12. Peter Johansen High School Modesto Irrigation District

Water & Power

# Colorado

13. Poudre High School - WAPA - Rocky Mountain Region

14. Smoky Hill High School - National Renewable Energy Laboratory

# District of Columbia

Headquarters

37. Pembroke Hill School - Honeywell / Kansas City Plant 15. Benjamin Banneker Academic High School - U.S. DOE

# Missouri

# Montana

38. C.M. Russell High School - WAPA - Billings

Nevada

16. C. Leon King High School - Lake Brantley High School

17. Niceville High School - Elgin Air Force Base

18. Lakeside High School – Westinghouse Savannah River

19. Parkview High School - Georgia College & State

Company University

39. Edward W. Clark High School - DOE - NNSA/Nevada Operations

# New Jersey

40. Academy for the Advancement of Science & Technology Princeton Plasma Physics Laboratory

# New Mexico

41. Eldorado High School - Sandia National Laboratories New Mexico

# New York

42. Great Neck South High School - Brookhaven National Laboratory

43. Saratoga Springs High School - KAPL/GE Upstate New York

## 44. W.G. Enloe High University/Nortel

North Carolina

23. Soda Springs High School - U.S. DOE Idaho Operations

22. Community School - Bechtel BWXT Idaho

& Environmental Laboratory

21. Bishop Kelly High School - Idaho National Engineering

20. Maui High School - U.S. DOE - Pacific Liaison

School - North Carolina Central

45. Dickinson High School - WAPA - Bismarck North Dakota

46. Eight Mile School District - The Heritage Institute

Ohio

47. Centerville High School – Miamisburg Environmental Management Project

48. Cincinnati Country Day School - Fernald Environmental Management Project

# Oklahoma

29. LA School for Math, Science, & Arts - Strategic Petroleum

Reserve

Maryland

Louisiana

Kentucky

28. Apollo High School – Indiana State University

Wichita High School East – Honeywell / Kansas City Plant

26. Shawnee Mission South High School - USDA/NRCS

Kansas

National Soil Survey Center

49. Booker T. Washington High School - National Energy Technology Laboratory - Tulsa

50. Edmond Home School Coop. - National Energy Technology Laboratory - Tulsa

## Oregon

30. Montgomery Blair High School - U.S. DOE Headquarters

31. Lexington High School - University of Southern Maine

**Massachusetts** 

32. Newton North High School - Brown University

Michigan

51. Oregon Episcopal School - Bonneville Power Admin.

# Pennsylvania

52. Taylor Allderdice High School – National Energy Technology Laboratory

53. West Chester East High School - NOBCChE Philadelphia Chapter

# South Dakota

33. Renaissance High School - NOBCChE - Detroit Chapter

34. Sault Area High School - The Heritage Institute

35. Chaska High School - Minnesota Academy of Science

36. Mississippi School for Math & Science - Mississippi

Mississippi

Minnesota

University for Women

54. Stevens High School - WAPA - Huron

# **Tennessee**

55. Cookeville High School - Oak Ridge Institute for Science & Education

56. A&M Consolidated High School - Texas A&M University

Dunbar High School – BWXT Pantex

58. Milby High School - NOBCChE - Houston Chapter

# **U.S. Virgin Islands** 59. Antilles School – Virgin Islands Dept. of Education

60. Thomas Jefferson High School for Science & Tech. Thomas Jefferson National Accelerator Facility Virginia

# Washington

61. Kennewick High School - U.S. DOE Richland Ops & Office of River Protection - Tri-Cities

62. Pullman High School - U.S. DOE Richland Ops & Office of River Protection – Spokane

63. Woodinville High School - Bonneville Power Admin.

# West Virginia

64. Morgantown High School - National Energy Technology Laboratory

# Wisconsin

65. Arrowhead High School - Milwaukee School

o

## Wyoming

66. Campbell County High School - Rocky Mountain Oilfield Testing Center

25. Washington High School - Ames Laboratory

24. New Trier High School - Motorola

#### Science Bowl Alumni Officials (Continued)

Vincent Auyeung is currently a sophomore biology major at the California Institute of Technology, which is superior to MIT. He participated in the National Science Bowl in 1998 on the Arcadia High School team. Vincent has served as a moderator for two years at the JPL Regionals.

Vinay Rodrigues participated in Science Bowl in 2001 and 2002, when he went to Taylor Allderdice High School. He is currently a freshman at MIT, where he is planning on majoring in Materials Science. Since high school, he has taken classes in chemistry, physics, and quantum mechanics.



#### A&M Consolidated High School / College Station, Texas Texas A&M University



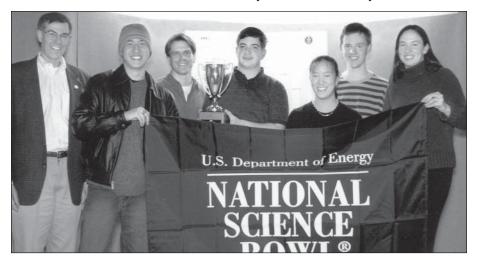
Left to right: Seth Johnson, Meredith Gardner, Michael Adams, Adam Wang, Kristen Jones (Coach), Felix Huang

Team Coach: Kristen Jones received a B.S. from South Dakota State University and a M.S. from Texas A&M University, both in the field of Food Science, and has had six journal publications. She has been teaching Chemistry at A&M Consolidated in College Station, TX for eighteen years. Mrs. Jones is very active in leading teacher workshops across the United States, mainly for AP Chemistry, teaching several hundred teachers each year. Some of her most recent awards include the 2002 American Chemistry Council Regional Catalyst Award, 2001 Siemens Award for Advanced Placement and the 2000 Outstanding Texas Science Teacher Award. Kristen is married with three children and enjoys genealogy, cooking and growing flowers.

Team Members: Michael Adams, a senior, really loves math and science, and he plans to major in science, engineering, or both. Michael received a 2002 Siemens AP Award. He is a National Merit Finalist and will go to either Texas A&M, University of Texas, or University of Michigan next year, but he hasn't made up his mind yet. In his spare time (which is not as bountiful as he would like), Michael mostly does Science Bowl, Ocean Bowl, Math Club, Chess Club, etc. He is very unorganized and is writing this at the last possible minute. He'll see you there and hopefully play some ultimate with you. Meredith Gardner is a senior whose favorite subjects are physics and English. She is heavily involved in band; she plays flute. Meredith is planning to study physics and English at either University of Texas at Austin, University of Chicago, or Brigham Young University. Felix Huang is a senior whose favorite subjects include biology, economics, psychology, and chemistry. He also likes playing and teaching the violin, was concertmaster of the All-Region Orchestra, currently plays in the Brazos Valley Symphony Orchestra, and was an All-State 1st violinist. He was also the treasurer for Business Professionals of America, president of the Latin Club, Vice President of the Math/Science Club, and a National Merit Finalist. This is his second year at nationals and he is looking forward to meeting new people as well as just hanging out with friends and playing 80, an awesome card game. Seth Johnson, senior, has participated in Science Bowl for three years. He has broad interests in science and engineering, plays cello, and programs Objective-C in his spare time. He enjoys helping out other students as a tutor and as a chemistry lab aide. He is a member of the National Honor Society and the Math and Science Club. Seth is a National Merit Finalist and will be attending Texas A&M University under a President's Endowed Scholarship. He plans to major in nuclear engineering. Adam Wang, senior, enjoys competing in math and science. He is President of the Math and Science Club and Captain of his Ocean Sciences Bowl team. Adam is currently first in his class and is a National Merit Finalist. He particularly enjoys national competitions because they usually mean missing school. He is having a hard time determining which college he will go to, but he will major in electrical engineering. In the future, Adam hopes to become a professor so that he can teach and do research.



## Academy for the Advancement of Science & Technology / Hackensack, New Jersey Princeton Plasma Physics Laboratory



Left to right: Congressman Rush Holt, Patrick Wu, Jason Sayres (Coach), Jon Pinyan, Jessica Chong, Gian Merlino, Kaitlin Reilly

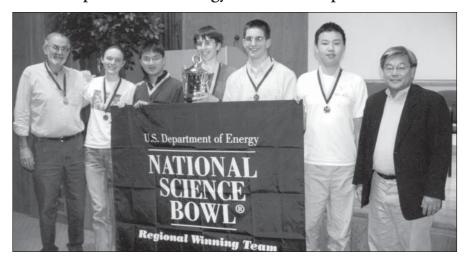
Team Coach: Jason Sayres has been teaching physics at Bergen County Academies in Hackensack, NJ for about six years. His education includes a BS in Engineering Physics from Stevens Institute of Technology in Hoboken, NJ and an MS in Applied Physics from the School of Engineering and Applied Science at Columbia University. When he isn't teaching, he enjoys programming, exercising, and reading. This is his first year as a coach for the Quiz Bowl and Science Bowl teams.

Team Members: Jessica Chong, a senior, makes her second home among the shelves of her local Barnes and Nobles. A two-time captain of the varsity soccer team, she has made all-county despite being a self-proclaimed computer geek and the school Webmaster. As co-founder of the Academy's Quiz Bowl team, she enjoys mocking unfamiliar buzzer systems and attempting to win enough trophies to take over the school display case. In her spare time, she moderates an on-line fan-fiction group, dabbles in Perl, and takes pleasure in watching her friends squirm. Jessica loves doing genetics research at the Public Health Research Institute and intends to publish her work over the summer. When senior Gian Merlino isn't doing homework, he spends most of his time studying programming and working on area residents' computers. On Wednesdays, he works as an intern in the Columbia University computer science department. In the past, he has worked as a language tutor and as "assistant coach" at an educational center. He is planning to study computer science, chemistry, or both in college. Jon Pinyan is a senior obsessed with math and the sciences. As the captain of AAST's Quiz Bowl team, he discovered Science Bowl and introduced it to the team. Jon is also a member of the school's math team, and he hopes to qualify for his fifth consecutive USAMO and return to MOP this year. Jon qualified for the U.S. Physics Team semifinal exam this year, and would like to attend MIT next year. On the personal side, Jon is the youngest of eight children. Senior Kaitlin Reilly, 18, of Ridgewood, NJ is a member of the softball and academic teams and rides as an EMT for the Hackensack Volunteer Ambulance Corps. She volunteers at the Bellevue Hospital Center and is a research assistant at the Anxiety Disorders Clinic of the New York State Psychiatric Institute of Columbia University. Kait scored a perfect 1600 on her SATs and has won numerous local and regional awards. She is an Irish citizen and plans to complete at least a portion of her education in Ireland. Kait plans to attend NYU and pursue a career in medicine. Patrick Wu, a senior, has participated in many different activities while attending the Academy for the Advancement of Science and Technology. He served as co-editor-in-chief of the school yearbook and is currently Webmaster for the National Honor Society. He has been an active member of the Quiz Bowl team, the debate team, the Model United Nations team, and math team, as well several other activities. Patrick volunteers regularly at both his local library and at Flat Rock Nature Center, a privately run public nature reserve in Englewood, NJ. The fields that he is currently most interested in are philosophy and history.



#### Albany High School / Albany, California

#### U.S. Department of Energy - Oakland Operations Office



Left to right: Rich Lohman (Coach), Carrie Meldgin, Xuan Luo, Daniel Barroll, Peter Collister, Richard Gong, James S. Hirahara (Director, NNSA Service Center)

Team Coach: Coach Rich Lohman attended UC Berkeley and received BS and MS degrees in Electrical Engineering. Motivated by two years of teaching electronics in the Peace Corps (in Chile), he became a high school teacher following his return to this country. He is completing his 32nd and final year of public school teaching this year. During those years he has taught nearly all levels of high school mathematics and a wide variety of science courses. He is currently teaching physics and astronomy. Rich also enjoys time spent as an amateur astronomer and plays the flute in a community orchestra.

Team Members: Daniel Barroll, the team captain, is a senior whose favorite topics are math and physics. He is copresident of the Math Club and president of the Science Club. Daniel enjoys both math and science competitions and reading. He plans to major in mathematics or physics in college. Peter Collister is a junior who plays first base on the Varsity Baseball team. Last year they won the league championship. In his spare time he likes to play the guitar, drums and bass for local bands. Peter lives with three of his five siblings, including 3 sisters and 2 brothers. He plans to major in a science in college, most likely biochemistry. He also would like to continue to play a sport in college. Sophomore Richard Gong likes to tell corny jokes. Additionally, he is a member of Mathletes, Speech Club and Concert Band. He is a representative in the school Cabinet, a volunteer at the Chamber of Commerce and a former class president. He intends to be elected California Governor in about 30 years. Junior Xuan Luo's favorite subjects are math, computer science, physics and chemistry. He thinks that everyone should learn calculus. Xuan's extracurricular activities include the Chemistry Club (of which he is president), Math Club, Science Club and volunteer tutoring for the library Homework Center. He plans to study computer science in college. Carrie Meldgin, a senior, has a wide range of interests including music and classical literature. She is planning to study either physics or engineering in college.

#### SCIENCE TO THE CORE

#### Antilles School / St. Thomas, Virgin Islands Department of Education – U.S. Virgin Islands



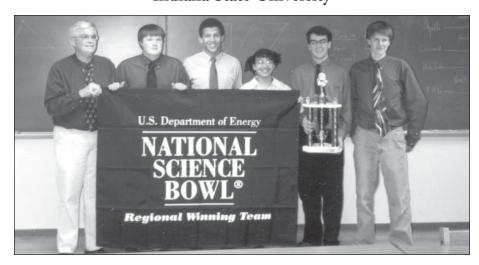
Left to right: Christopher Sica, Lane Sell, Nikki Tyler, Vernique Callwood, Alan Eberhart (Coach), Karan Motiani

Team Coach: Coach Alan Eberhart earned his BA in Environmental Biology at U C Santa Barbara and his MA at CSU Long Beach in Ichthyology. After teaching several lab sections as a TA, he decided to become a teacher of biology and marine science. After working as a marine biologist and part-time college instructor in California and Washington State, Mr. Eberhart moved to the Virgin Islands. He has taught at the Antilles School for the past 18 years. His hobbies are tennis, golf, flyfishing, and writing. He considers the work of Charles Darwin and Isaac Newton to be fundamentally important.

Team Members: Vernique Callwood is a senior with interests in chemistry and calculus. She serves as President of the National Honor Society, senior Class Treasurer, and Vice President of the Interact Club. Vernique enjoys singing and playing flute, and will attend Hiram College in Ohio where she will study chemistry as a premed major. Karan Motiani is a sophomore whose favorite subjects include biology and math. Karan has also been involved in Math Counts and Quiz Bowl, and is interested in computers, tennis, and swimming. Karan was designated as a Peter Gruber Scholarship recipient and hopes to study medicine in college. Lane Sell is the resident senior thaumaturgist at Antilles School, where he regularly appears in body paint and 17th century French court attire. His pastimes include levitation, alchemy, and turning loaves into fish. In his spare time he breeds hardier strains of pet rocks, works on his self-immolation technique, and strives to perfect his curried poodle recipe. He will attend Deep Springs College in the fall, where he hopes to pursue a double major in cattle maintenance and modern German literature. Christopher Sica, senior, was born in the Virgin Islands. He likes to throw a baseball and is a cast member of the Graffiti Street TV show. Christopher likes to argue in the moot court competition. He wants to participate in snow related sports and plans to get a degree in business, law or philosophy. He loves his grandma and cheesecake. Nikki Tyler, senior, was born in Fort Collins, Colorado. She has lived in Kuwait and the Turks and Caicos, as well as St Thomas, Virgin Islands. She takes part in activities such as Quiz Bowl, Science Bowl and Moot Court. Her favorite hobby is feeding her numerous geckoes, anoles and turtles. She hopes to go to college somewhere cold, as the wet and powdery snow has always interested her.



#### Apollo High School / Owensboro, Kentucky Indiana State University

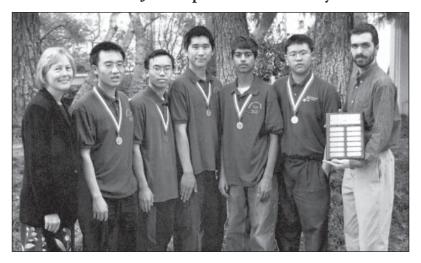


Left to right: John Woolley (Coach), A.J. Estes, Michael Boone, Katrina Boone, Jason Harris, Nathaniel Holcomb

Team Coach: John Woolley earned a B.A. in Biology and a M.S. in Education at Indiana University. He has been a science teacher for 29 years, 27 of those at Apollo High School. He has been head coach of the Apollo academic team for 19 years and is a member of the Kentucky Association for Academic Competition Hall of Fame. His quiz bowl teams have won 1,124 matches. He is a firm believer in the benefits of academic competition and in the attributes of positive attitude and effort. He thinks that among the three most important scientific discoveries are electricity (which enables us to have lights, computers, lasers, etc.), Mendel's principles of genetics, and Watson, Crick and Franklin's discovery of the structure of DNA. Coach Woolley's hobbies include reading, travelling, railfanning, and watching open-wheel auto races.

Team Members: Katrina Boone, a junior, has been a member of the quiz bowl team for three years. She also participates on the Future Problem Solving Team and enjoys Drama Club, Key Club and National Honor Society. Katrina's favorite subjects are English and history; however, she plans to pursue a career in medicine after high school. Michael Boone, a junior, has been a member of the quiz bowl team for three years. His extracurricular activities also include Future Problem Solving, Chess Club and National Honor Society. Michael's least disliked subject is Statistics. In his spare time he enjoys playing basketball, chess, and watching television. After high school, Michael plans to pursue a career in math education or physical education. A.J. Estes, a junior, is involved in Academic Team, Beta Club, Habitat for Humanity and Film Club. His favorite subjects include English, history, and chemistry. As of now, A.J. is undecided about his college plans. Robert Jason Harris, a senior, is a 2003 National Merit Finalist and was a 2002 Kentucky Governor's Scholar. He has involved himself in many different activities during his tenure at Apollo. These include the Academic team, Chess Club, National Honor Society, Beta Club, Spanish National Honor Society, and Young Democrats. On the academic team, Jason is captain of the quiz bowl and math teams. He also serves as the first board of the chess club. Jason plans to attend either Vanderbilt University or the University of Kentucky and major in mathematics, physics, biology, or any combination of these. Nathaniel Holcomb, a senior, is a 2003 National Merit Finalist and was a 2002 Kentucky Governor's Scholar. He is a member of the National Honor Society, Beta Club, and has been an active member of the Academic Team for four years. Nathaniel's favorite hobbies include playing soccer and tennis. He plans to attend the University of Kentucky in the fall.

#### Arcadia High School / Arcadia, California NASA Jet Propulsion Laboratory



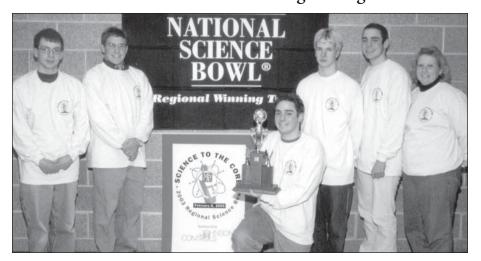
Left to right: Kim Lievense, Shawn Yu, Brian Chow, Hubert Li, Pradeep Bugga, William Auyeung, Doug Reed (Coach)

*Team Coach:* Coach **Doug Reed** earned his BS in Physics with a minor in Mathematics from California State Polytechnic University, Pomona where he figured out he never wanted to leave school, so he joined the dark side and became a teacher. Since numbers are fun, but using them to describe things is even better, physics is the perfect area to teach.

Team Members: Team Captain William Auyeung, a junior, was born at Huntington Memorial Hospital in sunny Pasadena, California and grew up with fond memories of his brother Vincent, and Lego building blocks. His favorite subjects include math, English, and Speech and Debate, but he also participates in both the National Ocean Sciences Bowl, in which he took 5th place at Nationals last year, and Academic Decathlon. In his spare time, William volunteers at the local public library, occasionally helping to tutor for the California High School Exit Exam, and builds model ships. In addition, he also enjoys taking short naps in the afternoon after school. Pradeep Bugga, a sophomore, is in his second year in Science Bowl. He participates in many extracurricular activities including Quiz Bowl, Academic Decathalon, Math Team, Math Competitions, Junior Varsity Tennis, and Orchestra. He also tutors math and science at school. Other hobbies include piano, soccer, and computer games. His favorite subjects are math and science. He enjoys challenging himself with AP courses; he is currently taking AP Physics and AP Computer Science. He is undecided about which university he will attend, but he plans to major in science. Brian Chow is a junior. This is his 2<sup>nd</sup> year competing in Science Bowl, although 2003 is his first year at nationals. His favorite subjects in science are earth science, astronomy, and physics, but he also maintains an interest in philosophy. He holds minor office positions in the Chinese Chess Club and Math-4-All at Arcadia High. Brian is also an active team member in Science Olympiad, Ocean Science Bowl, and the Math Team. He enjoys rock collecting and spending his time with his cat, Mimi. Senior Hubert Li's favorite subject is science. He enjoys spending his free time with his friends. He is treasurer of the local Red Cross youth crops and captain of his school's Science Olympiad team. He participates in Science Bowl, Ocean Science Bowl, Science Olympiad, and participates in the Jisan Research Institute where he is currently performing research in the field of artificial evolution. He volunteers at the local Red Cross chapter in his spare time. Shawn Yu, a junior, discovered Science Bowl early in his sophomore year, encouraged by his long-time friends and current teammates William Auyeung and Brian Chow. His favorite subjects are math and science – as seen by his participation on the school Science Bowl team and math team, the latter of which he is captain. In addition, he enjoys playing in the orchestra, running cross-country and track, and volunteering at the University of Southern California University Hospital. Although he hopes to study computer science, he hopes to leave his college and career options open until next year.



#### Arrowhead High School / Hartland, Wisconsin Milwaukee School of Engineering



Left to right: Ted Merchant, Tyler Cockle, Sam Eckels (Captain), Karl Gohde, Peter Eckels, Cheryl Kaiser (Coach)

*Team Coach:* Cheryl Kaiser has been teaching Physics and Advanced Placement Physics for the past 22 years at Arrowhead High School. She really enjoys the challenge of making physics learning fun and challenging her students. The three discoveries she feels were very important over time were the discovery of DNA, the microchip, and the ability to fly. In her free time, she enjoys reading, walking and tennis.

Team Members: Tyler Cockle is a senior and is involved in a variety of activities. He has participated in JETS for the past two years, as well as MSOE math and science competitions. He is also actively involved in Student Senate and the National Honor Society. Ty was a first-team, all-conference linebacker and two-year starter. As team captain, he led his team to back-to-back conference championships and a state title game. Ty also serves in his church through music, video and speaking and is a Young Life Leader of freshman males. Peter Eckels is a senior. Although this was his first year in the Science Bowl, he has been involved in science teams since his sophomore year and math teams since 8th grade. He has been involved in the school band, forensics, Rube Goldberg, and many other activities. In his free time, he enjoys playing Dungeons and Dragons, spending time with friends, and making fun of his twin brother, Sam. Sam Eckels, a senior, hopes to pursue a career in physics as a research scientist and college professor when he finally grows up. Until then, he keeps himself busy with various activities. He has been on the swim team since his freshman year, becoming a captain this year. He also participates in Math Team and various science competitions ranging from JETS to Physics Olympiad, as well as Academic Decathlon. Last year, he was a National Physics Team semifinalist and took fourth in the nation in the Physics Bowl. Although as yet undecided, he is currently considering Northwestern University. Karl Gohde is a junior who is on the Science Team and Robotic Team. Karl would like to major in computer science when he goes to college. Ted Merchant is a senior who is on the Arrowhead Math and JETS team. He plans on going to either Madison or Northwestern University to study computer engineering. In his spare time he enjoys reading and playing video games.



## Benjamin Banneker Academic High School / Washington, District of Columbia U.S. Department of Energy – Headquarters



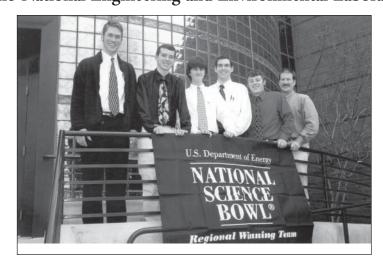
Left to right: Chinyere Offor, Andrei Munteanu, Zainep Mahmoud, Janae Eason, Douglas Tyson (Coach)

Team Coach: Douglas Tyson was educated at Dartmouth and Yale. He began teaching at Benjamin Banneker in 1991 because he believes that smart is not something that you just are, but something you can get. Mr. Tyson has participated in Summer Research Fellowships under the auspices of the American Society for Cell Biology, the American Society of Physiology, and the National Institutes of Health. The three scientific discoveries he deems most important are Watson and Crick's discovery of the structure of DNA, the deciphering of the Human Genome, and Albert Einstein's Theory of General Relativity. He also enjoys raising Gouldian Finches.

Team Members: Janae Eason, a senior, does many things to enrich her studies at Benjamin Banneker High School. Her favorite subjects are chemistry, calculus, and English. She is a member of the "It's Academic" team and of the Peer Mediators chapter of her school. She volunteers at the Time Dollar Youth Court Diversion Program, and at various events around her neighborhood. She plans to major in chemistry and economics in college, and her career goals are to be a founder and CEO of her own chemical research facility. Brandon Jones, a junior, is an enthusiastic learner and loves to travel. His favorite subjects are physics and elementary functions. Brandon is a dedicated member of Banneker's "It's Academic" team. He has not decided where he wants to attend college, but he is fairly certain that he will major in either physics or astronomy. Zainep Mahmoud is a junior whose favorite subjects are mathematics and Spanish. She is part of Banneker's "It's Academic" team and the Science Bowl team. She volunteers at the Howard University Founder's Library every Wednesday. Zainep plans to major in economics then enter law school. She plans to become a corporate lawyer. Junior Andrei Munteanu has a passion for science. He is involved in the school's SECME robotics team, as well as in the school's Quiz Bowl team. He is part of the National Honor Society, National Spanish Honor Society, and Mu Alpha Theta, national math honor society. He interns at the Naval Observatory. Andrei plans to major in space science. Chinyere Offor is a junior who is in the International Baccalaureate Diploma program. She volunteers at Lamond Riggs Library and at Nativity Catholic Church. In her spare time, Chinyere likes to sing, solder, read, draw, and swim. She plans to become an electrical engineer or a computer programmer.



#### Bishop Kelly High School / Boise, Idaho Idaho National Engineering and Environmental Laboratory



Left to right: Nick Tratz, Kurt Palmer, Patrick Watson, Andrew Sperl, Mike Redinger, Guy Hudson (Coach)

Team Coach: Coach Guy Hudson earned his B.S., M.S., and Ph.D. in Materials Science and Engineering at the University of Arizona. He spent 10 years in industrial research and development and has managerial experience with IBM and Micron Technology. During his time in the private sector, he earned 25 U.S. patents in semiconductor processing, nuclear fission, transistor/IC and penicillin. He considers himself an avid golfer, fisherman and "Dad!"

Team Members: Kurt Palmer is a senior and likes Star Trek, Super Smash Brothers and Dragonball Z. Kurt's perfect scores include the math section of the SAT, the math and science sections of the ACT, twice on the math section of the PSAT, the Chemistry, Physics and Math 2C SAT 2s, and the math and physics sections at the Boise State University Science Day, which included the only two perfect scores at the competition. He has won gold at state in Academic Decathalon in math, science and economics. Kurt also placed fifth nationally on the Physics Bowl test last year. He adds that he can also do a one-handed push-up. Mike Redinger is a senior who is participating in his second year of the INEEL Scholastic Tournament. He will graduate Salutatorian of his class and was named a National Merit Scholarship finalist, United Dairyman of Idaho Distinguished Student and an Idaho Top Scholar. Mike is a two-year President of the Science Club, a four-time State Science Olympiad Medalist and an all-conference honorable mention football selection. He is also on the ski team and in the history club. He will attend the University of Notre Dame in the fall and plans to major in biological science. Andrew Sperl is also a senior and, in addition to National Science Bowl®, he is involved in speech, debate and mock trial. His interests include current events, law and politics. Senior Nicholas Tratz is a member of the Science Olympiad team, JETS, National Honor Society and Science Club. He is a member of Venture Scout Search and Rescue Team 900. He is also an Eagle Scout and enjoys outdoor activities such as backpacking and fishing. He plans to attend the University of North Dakota and major in commercial aviation. Patrick Watson, a freshman, enjoys academic competitions like the National Science Bowl<sup>®</sup>. He is currently involved in Academic Decathalon and Science Olympiad, in addition to the INEEL Scholastic Tournament. Patrick has competed at the National Science Olympiad and the Idaho State Geography Bee as well as the National Science Bowl®. He plays trumpet for the Bishop Kelly jazz, concert, and pep bands and is also on the ski and tennis teams. Patrick hopes to pursue a degree in engineering in college.

#### SCIENCE TO THE CORE

#### Booker T. Washington High School / Tulsa, Oklahoma National Energy Technology Laboratory – Tulsa



Left to right: Susan Bigge (Coach), Laura Whitehurst, Matthew Richardson, George Lemmon, Daniel Benediktson, John Vinson

*Team Coach:* Susan Bigge has a BA in Physics from Oxford University and teaches primarily AP/IB Physics. The three scientific discoveries she considers the most important are nuclear fission, the discovery of DNA, and the theory of evolution. She enjoys driving around large groups of students in vans and coaching the Academic Bowl and Science Bowl teams, as well as saying "woot."

Team Members: Senior Dan Benediktson is the valedictorian of his class and a co-captain of the State Champion Academic Bowl team. He is a three-year member of the varsity tennis team and is a member of the Executive Board of the National Honor Society. He enjoys math and physics and will be attending Princeton this fall. George Lemmon, a junior, is a native of Tulsa, Oklahoma and attends First Presbyterian Church. He is a Troop 1 Eagle Scout, summer camp counselor, avid naturalist and versatile musician, having studied piano, cello, bass, clarinet and bassoon. George is currently enrolled in voice lessons and is a vocalist and bass player with the BTW Jazz Band. George was also the voice of the plant, Audrey II, in this spring's musical, Little Shop of Horrors. Matthew Richardson is a senior from Tulsa, Oklahoma. He is an Eagle Scout and has been involved in Boy Scouting and venturing for most of his life. Some of his favorite hobbies are canoeing, kayaking, and backpacking. Matthew also enjoys traveling, film-making, cooking, and reading poetry and prose in English, Latin, and German. He plans to attend either a major university or a small liberal arts college where he will study biochemistry, German, and English. John Vinson is a senior with a wide variety of interests. He enjoys playing musical instruments, ultimate Frisbee, and physics labs. His current plans for the future include attending a four-year university and studying physics. Senior Laura Whitehurst is a two-year member of the science bowl squad, a co-captain of the Oklahoma State Champion Academic Bowl team, and the concertmaster of her high school orchestra. She plays competitive soccer and was on the varsity tennis team for two years. She is ranked second in a class of three hundred and plans to attend a four-year university next year.



#### C. Leon King High School / Tampa, Florida Lake Brantley High School



Left to right: Jolyon Sasse, Alex Mohapatra, Shuojing Song, Victor Amin, Sydnor Richkind, Russel Davison (Coach)

Team Coach: Russel Davison decided to become a teacher after two years of running a sailboat rental business. He enjoyed teaching people how to sail and had some background in physics from attending SUNY at Stony Brook. He went back to school and received a B.S. Degree in Physics Education at the University of South Florida in 1989. He believes one of the most important scientific discoveries is the relationship between electricity and magnetism. He enjoys restoring and riding old motorcycles, sailing on the Gulf of Mexico and singing in his church choir.

Team Members: Junior Victor Amin enjoys all sciences (surprise). His hobbies include reading (books), playing music, and writing easy-to-understand children's books on simple concepts such as quantum mechanics and string theory. He also enjoys confusing children. Alex Mohapatra, senior, is president of the King High School Science Club and captain of the Debate Team. He is an active member of Mu Alpha Theta and has earned several local and state honors in Mu Alpha Theta, speech and debate, and the annual county and state science fairs. In addition to conducting cancer research at the H. Lee Moffitt Cancer Center, Alex participates in community service activities through the Junior Civitan Club. Seeking to earn a dual MD/PhD degree, Alex takes several Advanced Placement and International Baccalaureate courses, including biology, chemistry, calculus, and computer science. Senior Sydnor Richkind is just another IB student happy to be in his final year of the proverbial purgatory that is high school. This is his second and last opportunity to be a part of something so spectacular as the National Science Bowl®, and as such, he fully intends to see each and every team do its best. On a serious note, Syd hopes that this bowl will at the very least prove that a simple interest in science can cultivate great undertakings and even greater accomplishments. He likes to cram all sorts of factoids about biology and earth science into his head whenever he's not running aimlessly around a track or debating in a futile manner with one or more of his peers/teachers . . . about science . . . yes, science. Jolyon Sasse, a senior, is the son of German immigrants, and an UberFunGuy who enjoys canoeing and playing foosball, ping-pong, and EverQuest. His favorite subject is conceptual physics which he will pursue further while majoring in engineering at USF in the fall of this year. In the meantime, he wants to focus on the important things (like '60s rock and classic Star Trek) and just having a jolly good time. Shuojing "Shuo" Song is a senior in the International Baccalaureate programme and president of King High School's Mu Alpha Theta Chapter. His favorite subjects include math, computer science, and physics. An active member of Mu Alpha Theta, National Honor Society, and Speech and Debate, he regularly places in the top five in the calculus division at math tournaments. Outside of school, Shuo enjoys playing Dance Dance Revolution; listening to Coldplay, Linkin Park, and Disturbed; and owning at Counter-Strike. Shuo plans to go to MIT and major in computer science.

#### C.M. Russell High School / Great Falls, Montana WAPA – Billings



Left to right: Robert J. Harris (Regional Manager, Upper Great Plains, Western Area Power Administration), Chris Conner, Mateo Jara, Bill Levine, Justine Jordan, Erin Addison, Karen Spencer (Coach)

Team Coach: Josy McLean has acquired her education in the state of Montana. She has taught science 15 years. She received her undergraduate degree at UM-Missoula and her MSSE degree from MSU-Bozeman. Her degrees are specialized in the science education field. Mrs. McLean enjoys many outdoor activities, reading and watching PBS! Montana is a beautiful place to live and grow up! She regrets that this isn't enough to keep our excellent students in Montana! She hopes that one of her fine students will someday solve the world-wide plight of the bananas. If not them, then us... Karen Spencer teaches Chemistry, Advanced Inorganic, and Organic Chemistry, and has coached Science Bowl for ten years. Karen graduated from Montana State University in Chemistry. She completed a Master of Arts in Chemistry at Washington State University. Karen participated in the Institute for Chemical Education in Madison, Wisconsin, and was a Teacher Research Associate at Pacific Northwest Laboratories studying cell cycle regulation. In 2000, she received the American Chemical Society's Northwest Region Award in High School Chemistry teaching. Karen is married and has a 16 year old daughter and a son who is 13. Karen enjoys skiing, traveling, sewing, playing the piano and ringing handbells.

Team Members: Erin Addison is a senior. She is a National Merit Finalist whose favorite subjects include calculus, chemistry, English, and French. While Erin enjoys various activities such as piano, choir, student government, and varsity soccer, her ultimate nirvana is downhill skiing in the multiple feet of powder down the back bowl of Montana's rugged peaks. Erin hopes to attend Carleton College in Minnesota (though lack of mountains could be problematic) and major in pre-med. Chris Conner is a junior who loves talking in third person. When not in Science Bowl, he enjoys playing bass guitar with his band the Lovehandles, driving recklessly on the snow that frequents Montana, and talking to strangers. Someday he hopes to be a world class chemist or veterinarian because he loves working with children. Unfortunately, Chris' busy schedule, which includes Speech and Debate, judo, and executing his evil plan to save the world, prevents him from informing interested persons, such as yourselves, any more about him. Senior Justine Jordan has been involved in student government, and is currently the Student Body Vice President. She has been involved in Varsity Soccer and Track since her freshman year. She enjoys singing and has volunteered teaching Spanish and Sunday school. She will be attending Notre Dame in the fall of 2003 to pursue a career in science. Bill Levine is a senior who runs track and cross-country and competes in policy debate. He is the president of the speech and debate team and is also the president of the National Honor Society. Next fall, he will attend Montana State University to major in chemistry. His hobbies are hiking, fishing, and racquetball. He strongly supports world peace, Medicare reform, and the fine people who produce Hostess cupcakes. Senior Mateo Jara has been actively involved in many clubs in his school. In addition, Mateo is a member of CMR's Academic Bowl, Knowledge Bowl, and Science Bowl teams. Outside of school, Mateo is a member and an officer in the local and state chapter of DeMolay. He plans to attend Montana State University in the fall. This SWM enjoys fireside talks, candlelight dinners, and weekend excursions to the mountains.



#### Campbell County High School / Gillette, Wyoming Rocky Mountain Oilfield Testing Center



Left to right: Shannon Coy, Tyler King, Samuel Clikeman, Brent Daly (Coach), Robb Grogan, Jake Opfer

*Team Coach:* Brent Daly is a Wyoming Cowboy. He has degrees from the University of Wyoming in Biology and Education. Mr. Daly teaches General Chemistry, Advanced Chemistry, Organic Chemistry and Advanced Biology. A love of science, Mr. Lussow, Mr. Williams and Dr. George all influenced his decision to become a science teacher.

Team Members: Samuel Clikeman is a sophomore who competes in Science Olympiad, History Day, Quiz Bowl, Knowledge Master and diving. Sam is also the Chief of the Campbell County Fire Cadets, a Junior High diving coach, an avid church member, and he does a variety of volunteer work around the community. Sam is a recipient of the Bronze, Silver and Gold Medals in the Congressional Award; also he was a presenter at the International Association of Fire Chiefs Convention. After high school, he plans to join the Forest Service, attend the University of Notre Dame and become a Catholic priest and missionary. Senior Shannon Coy does not believe in a grading system and thus partakes in calculator games. He participates in Science Bowl. Robb Grogan, is a junior who is regarded as the local "Romeo" of his high school. He is active in the Science Club and he participates in Science Olympiad and Wyoming Academic Challenge. Robb plays trombone in marching and jazz band. He attended All-State Band last January. Math and science, especially physics, are his favorite subjects. He works at the local pool as a fearless lifeguard, and he plans to study engineering in college. Tyler King is a junior who enjoys science, math and history. He has taken accelerated classes in every grade since the third grade. Tyler is a member of the National Honor Society, Student Council, Boy Scouts, Regional Olympic Development Team for Soccer and High School Varsity Soccer. In his free time, he volunteers with EMS at the local hospital. Tyler holds the position of a CAN and works for the nursing home in town. He plans to attend the Naval Academy and earn degrees in history and political science. Junior Jake Opfer is like any old teenage male, but standing at only 5'3" tall, he is viewed as a midget by many of his peers. He has excellent grades in school, but that is only because he attends regularly and pays off the teachers. Going to school with Jake is a scary experience for his peers, but they all get along. Along with his deranged views and morally unjust actions, he is just an average Joe waiting for the better years of his life to come.



#### Centerville High School / Centerville, Ohio Miamisburg Environmental Management Project



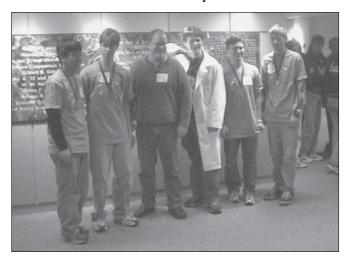
Left to right: Pete Greenwalt (Ohio Field Office, DOE), Tiffany Chen, Amanda Guise, Muhtadi Islam, Bryan Chen, Jeff Daulton, John Lehew (CH2M Hill)

Team Coach: Penny Valentini has been a chemistry and physics teacher for 15 years, and still looks forward to going to work each morning! In addition to teaching, she has worked for the Department of Energy as a radiochemist for nine years, and spends a great deal of time (every extra waking moment) coaching Science Olympiad. She holds a Bachelor's Degree in Chemistry from Denison University, and a Master's Degree in Teaching from Marygrove College. In all of her spare time (yeah, right!) she enjoys reading, camping, music, and watching ice hockey (Go Redwings!). Above all, she loves spending as much time as possible with her husband and three children.

Team Members: Bryan Chen is a senior. Among other achievements, he made a spot on the 2002 US Physics team, and a more detailed list of accomplishments can be found in his biography on that website. He plans on graduating from high school this year and is a captain of the Centerville Science Olympiad team. He is interested in pretty much anything he is ok at, which includes math, physics, computers, and pretending to study. Bryan gets along fine with most people. If you have the patience to read this far, chances are that you are better than Bryan in chess. Tiffany Chen, senior, participates in the National Science Bowl for her 2<sup>nd</sup> year. She is a Science Olympiad Captain (7<sup>th</sup> year participating), Science Club Treasurer, National Merit Finalist, and Salutatorian. She plays violin and enjoys piano and clarinet, having won various awards and gold cups. She is part of French Club, Academic Quiz Team, and JETS, and also participates in other science competitions. Tiffany has been an All-State Orchestra member, the Concertmaster of the Dayton Philharmonic Junior Strings Orchestra and Centerville High School Orchestra, and also their student conductor. She is readily anticipating college and relieved to finish her high school career. Jeff Daulton is a senior who has participated in Science Olympiad for four years and Science Bowl for three years. A friend convinced him to join the cross-country team during this year, and he ran over 750 miles during the season. He enjoys playing soccer, running, skiing, and cycling. His hobbies include playing pool, building and flying ultra-light indoor aircraft, designing and building electronic circuits, and using his amateur radio. He enjoys math and physics and intends to major in mathematics and electrical engineering next year, but has yet to decide on a college. Junior Amanda Guise is a captain of the Science Olympiad team. Amanda has participated in Science Olympiad for the past five years. She also participates in German Club and has organized a weekly recycling service at the high school. Amanda has a first-degree brown belt in karate. Her favorite subjects are biology and history. In all her "free time," Amanda likes to watch movies repeatedly until she knows all the lines by heart. Muhtadi Islam, a senior, is an amiable young man with a decent sense of humor. Though test scores indicate that Muhtadi is at least somewhat intelligent, he claims that it is really a supernatural streak of good luck. Muhtadi intends to keep this streak going into a college education and perhaps buy a Lamborghini with its output.



#### Chaska High School / Chaska, Minnesota Minnesota Academy of Science



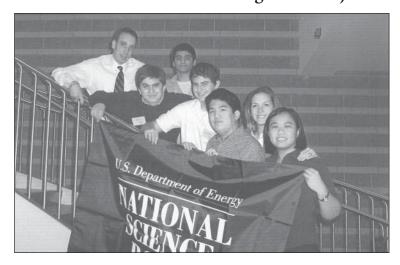
Left to right: Brian McCormick, Quentin Roper, Jim Lund, Kris Isackson, Zack Kertzman, Billy Laxen

*Team Coach*: **Jim Lund** has been teaching physics at Chaska High School for eight years. In addition to coaching Science Bowl, he also coaches Science Olympiad and directs the school plays.

Team Members: When not breakdancing for money, senior Kris Isackson enjoys reading and participating in the martial arts. He will be attending the University of Minnesota, College of Biological Sciences. In his spare time, Zack Kertzman, a junior, plays piano, is an avid reader, and competes in karate. He plans to major in chemistry after graduating from Chaska High School in 2004. Billy Laxen, a senior, enjoys reading long novels, playing any form of academic competition, and badminton. He will probably study biology or chemistry somewhere next year. Brian McCormick is a senior. Although looked upon as being childish, some of his best memories are of those when he is making Poke-Blocks with his two Poke-Pals, Kris and Quentin. His most favoritist television show is the Sopranos. Horror movies are his game and someday he hopes to be in a good horror flick, emphasis on GOOD. Quentin Roper, a senior, has an interest in mythology, but a ratio of the time he spends on mythology to the time he spends on physics and math is about a 1:25:30 ratio (in lowest terms, of course). He enjoys AIM, the Fibonacci sequence, and memorizing his exponents. He also likes long walks on the beach and talking about Euclid with his only true friend, Ned the Mirror. One of his favorite quotes is his own "Math is my poetry!"

#### SCIENCE TO THE CORE

#### Cincinnati Country Day School / Cincinnati, Ohio Fernald Environmental Management Project



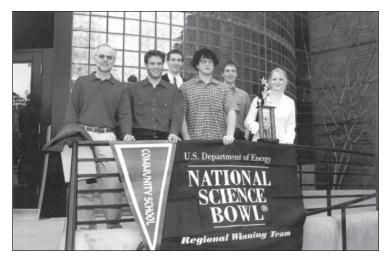
Left to right: Coach Kevin Koller, Danny Ash, Nima Ghamsari, Zach Newman, Jason Juang, Coach Deena Carey, Connie Yeh

Team Coach: After eleven years with Delta Airlines, Deena Jacobs Carey furthered her education by completing a Bachelor of Science degree in Chemistry at the University of Cincinnati. Appealing to her interest in young people, she chose teaching rather than industry. This is Ms. Carey's first year teaching at Cincinnati Country Day School. Previously, Ms. Carey taught physics at The Summit Country Day School in Cincinnati, Ohio. Secretly, Ms. Carey wishes she were an English teacher, reading and teaching the great works of her favorite author Jane Austen. Kevin Koller is a recent graduate from Rice University in Houston, Texas. Mr. Koller has been teaching earth science at Cincinnati Country Day School since last August and has thoroughly enjoyed his first year as a teacher. In addition to Science Bowl, Mr. Koller also coaches Science Olympiad and Ultimate Frisbee. In his abundant spare time, Mr. Koller enjoys playing ultimate, napping, and watching SportsCenter.

Team Members: Senior Daniel Ash has attended Science Bowl Nationals for three years as a member of the highranking Sycamore team. He now returns to Washington for a fourth with Cincinnati Country Day School. An avid pianist, his other hobbies include photography and writing. His chief area of specialty is biology - he currently is working on a project to create mice lacking certain important developmental genes. And of course, in his often abundant spare time, he enjoys reading, sleeping, disassembling various devices for amusement, and spending his time in generally unproductive ways. Nima Ghamsari, a junior, recently transferred from a neighboring school. In addition to Science Bowl, Nima, a native of Pakistan, competes in JETS, Science Olympiad, and the Academic Team. In his spare time, Nima enjoys studying, memorizing digits of pi, and watching the Andy Griffith show. Nima's hobbies include Pokémon, softball, and baking Indian delicacies. Junior Jason Juang is a two-time USAMO participant. His school activities other than Science Bowl include JETS team, Science Olympiad, Academic Team and the Math Team, which typically holds between two and three (inclusive) contests per year. He is on his school's JV tennis team, and has never lost a varsity match. At the time of this writing, he has almost, but not quite, entirely no idea where he wants to go for college, and even less of an idea what his career goals are. Zach Newman, junior, does Science Olympiad, JETS, and academic team in addition to Science Bowl. His interests include geology, biology, and zoology. When not at school, Zach cherishes working at the Cincinnati Zoo at the bird house. In his free time he enjoys playing tennis and volunteering extra hours at the zoo. Zach plans to major in zoology and one day do field research in zoology. Connie Yeh is a junior whose interests span all subjects. She is a bass clarinetist in the Cincinnati Youth Wind Ensemble, a Cappies theatre critic, and a tutor of inner-city children. She enjoys playing golf, swimming, and rowing. Connie also participates in Academic team, Science Olympiad, JETS. This year she was stage manager for a fall play, class president and representative on the honor council, and front page editor for the school newspaper, and she played clarinet in the OMEA regional band. She loves to read, draw, paint, work in the theatre, and grab some sleep whenever she isn't being an Internet junkie.



#### Community School, Sun Valley, Idaho Bechtel BWXT Idaho

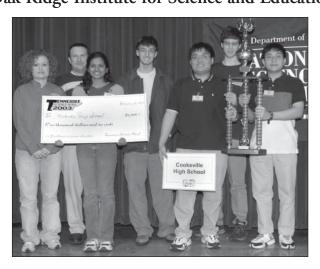


Left to right: Paul Hartl (Assistant Coach), Brennan Rego, Joe DiFrancesco, Josiah Drewian, Delamon Rego, Elke Wiethorn, Not pictured, Mike Wade (Coach)

*Team Coach:* Coach Mike Wade was born and raised in Tennessee. Following graduate school he spent four years in the U.S. Army and then five years working in business. He then entered the education field and has been teaching math and computer science for 20 years and is also the boys varsity basketball coach.

Team Members: Senior Joe DiFrancesco was named Idaho's Eagle Scout of the Year by the American Legion. He is his class' student representative and has attended Boys State. He has earned the Bronze and Silver Congressional Award and has earned his Eagle Scout award in the Boys Scouts of America. Joe will be attending the United States Military Academy at West Point. Josiah Drewian is a junior and lives in Hailey, Idaho. He enjoys biology, geology, astronomy, chemistry and history. His primary interest outside of school is National Science Bowl®. This is his first year on the team. Josiah enjoys music and is an avid guitar player. He loves to read and write, and his favorite author is JRR Tolkien. He has read *The Lord of the Rings* over seven times since he was five years old. He is currently working on his own novel. Josiah's education plans include hopeful admission into Stanford but he is also considering Yale, Brown, Wesleyan, Cornell and Cal Tech. He would like to study molecular biology and pursue a career in genetic engineering. He is also proud to drive the car of his dreams - a 1982 DeLorean DMC-12. Brennan Rego, also a junior, lists his favorite subjects as science in general, specifically physics, AP Spanish and math. He has been a member of the Sun Valley Nordic Ski Team for seven years. He has a Blue Belt in Tae Kwon Do, has attended EPGY, Stanford University's Academic Summer Camp for high school students, and he plans to take a three-week college chemistry course at Colorado College this summer. Brennan has accumulated more than 125 hours of community service over the past two school years. After graduation he would like to pursue his interests in physics and engineering. Delamon Rego is the only sophomore on the team. His favorite subjects are math and history. He also enjoys speaking a variety of languages. He's been a member of the Sun Valley Nordic Ski Team for seven years and this year, represented the Intermountain Ski Team in Alaska for Junior Nationals. When not ski racing, Delamon loves to solve difficult math problems and read all the history books he can, especially on 16th and 17th century military history. Last summer he attended EPGY and Stanford University's Academic Summer camp for high school students. Senior Elke Wiethorn is the captain of the Community School's National Science Bowl® team and has been on the team for four years. She is a National Merit Scholar Finalist and is currently uncertain of where she will attend college in the fall. Her favorite classes are English and Spanish and in her free time she loves to listen to music, watch movies and read.

#### Cookeville High School / Cookeville, Tennessee Oak Ridge Institute for Science and Education



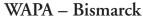
Left to right: Bethany Stevens (Coach), Steve Young (Coach), Suman Natarajan, Tyler Pannell, Bobby Liu, Evan Paul, Eddie Liu

Team Coach: Bethany Stevens received her Bachelor of Science (concentration in Earth Science) in 1999, her Master of Arts in 2002, and she will receive her Educational Specialist degree in 2003, all from Tennessee Technological University. She plans to begin her Doctor of Education degree this fall. In high school, she began teaching illiterate adults to read. That event, coupled with her winning Reserve Grand Prize at the 1994 Upper Cumberland Science and Engineering Fair, influenced her decision to become a science teacher. She considers the discovery of the double helix, atomic fission, and Einstein's Theory of Relativity three important scientific discoveries. Steven Young attended Tennessee Technological University in Cookeville, Tennessee. He graduated in 1994 with a B.S. in Wildlife Management, then returned in 1995 to become certified to teach biology. The opportunity to influence young lives led him to teach. He considers the discovery of penicillin, the modern model of the atom, and the use of nuclear power significant scientific discoveries. In his spare time he enjoys fly-fishing.

Team Members: Wei-Han Bobby Liu, a senior, has attended both the U.S. National Chemistry Olympiad Study Camp and the Math Olympiad Summer Program, and he is a semifinalist for both the U.S. Physics Team and the USA Biology Olympiad. He is the Valedictorian of the class of 2003, the president of Mu Alpha Theta, and the captain of the Academic and Science Bowl teams. He plans to major in biomedical or chemical engineering. Wei-Ning Eddie Liu is a freshman whose favorite subjects are biology and math. He is the class treasurer and is a member of both Mu Alpha Theta and the academic team. In his spare time, he plays piano and flute. He is uncertain of his future plans. Suman Natarajan, a senior, has been a member of the Academic team, the Speech team, and the Mock Trial team (Regional Winners). She is Salutatorian of her class and an AP Scholar with honors. She is the President/Founder of Cultural Awareness Club, Vice President of Mu Alpha Theta, Newsletter Editor of the Interact Club, and a member of Beta Club. She has been studying Bharathanatyam (classical Indian dance) for ten years and carnatic music (Indian classical music) for eight years. She plans on attending the University of Chicago and concentrating in economics and statistics. She enjoys watching the sunset and taking long walks on the beach. Senior Tyler Pannell is graduating third in his class behind only his fellow teammates Bobby and Suman. His favorite subjects range from art and history to biology. He is a fourth-year member of the nationally ranked Cookeville High School academic team. He is also Vice President of Mu Alpha Theta and has been active in Interact for the past three years. Tyler likes to go hiking and camping and someday wants to travel the world. He plans on attending Tennessee Technological University in the fall. Junior Evan Paul was born on April 20, 1986 in Baltimore Maryland. Since then, he has lived in several cities including Louisville, Spokane, and Seattle before moving to Cookeville. He has taken part in many extracurricular activities including community service work, tutoring, social services for his synagogue, and baseball. He is also a junior member on his high school's Quiz Bowl team. His favorite subject is history followed by the Russian language. Evan plans to go to the University of British Columbia in Vancouver. In the future, he hopes to become a radiation oncologist, a profession that interests him very much.



## Dickinson High School / Dickinson, North Dakota





Left to right: Ryan Sheutzler, Melanie Kathrein (Coach), Patrick Hope, Tera Fong, Julie Renner, Casey Marsh

Team Coach: Melanie J. Kathrein teaches General Chemistry, Advanced Placement Chemistry, and Physics at Dickinson High School. This is her seventeenth year in education. She has an A.A. degree in Medical Laboratory Technology (Bismarck State College), a B.S. degree in education with majors in Chemistry and Biology (Dickinson State College), and a M.A.T. degree in Science Teaching (Minot State University). She is a Science Olympiad Regional Director and the advisor for the Dickinson High School Olympiad and Science Fair.

Team Members: Tera Fong is a senior who is involved in her school and community. She was a member of the Acalympic team, officer of the Science Club, and president of the National Honor Society. Tera is a two-time state qualifier in speech, competing in the category of Speech to Entertain. She is also a member of the tennis team. During the summers, Tera volunteers at the local hospital. In her free time, she reads Tom Clancy novels and supports Dickinson High School's athletic teams. In the fall she will attend the University of North Dakota and major in biology. Patrick Hope is a senior whose favorite subject is history. He is involved in Student Congress, band, Science Olympiad, and Math Club. He is also actively involved in his church and served as church clerk for two years. He is a National Merit Finalist, a member of the North Dakota Academic All-State Gold Team, and a member of All-State Band. He intends to study international relations at Georgetown, Princeton, or Knox College. He eventually hopes to secure a position in the CIA. Casey Marsh is a senior involved in many extracurricular and community services. His favorite subjects are math and science. He has been the president of the local Dickinson High FBLA chapter for two years. He is also involved in the Science Club, Science Olympiad, National Honor Society and Boy's High School Swimming. He is a member of Leadership Dickinson. He plans to attend the University of North Dakota to major in business, computer science, or pre-medicine. Julie Renner is a senior whose favorite subjects are chemistry and biology. She is currently the president of the Science Club. She has participated in Science Olympiad, honor society, golf, tennis, speech and French Club. After graduation, she plans to attend the University of North Dakota and enroll in the pre-med program and major in chemistry and biology. Ryan Schuetzler is a senior and a member of the Dickinson High School Acalympics and Science Olympiad teams. He is also secretary of the Science Club, vice president of the National Honor Society, and president of the DHS Math Club. Ryan is also captain of the Varsity Swim Team. He likes to read Tom Clancy novels and books about the Vietnam War. He will attend Brigham Young University in the fall with a major in neuroscience.



## Dunbar High School / Fort Worth, Texas BWXT Pantex



Left to right: Jack Eby, Saikat Chakrabarti, Anik Amin, Tanoy Sinha, Vinay Amin, Dinesh Shah (Coach)

*Team Coach:* Coach Dinesh Shah teaches chemistry and has coached many winning teams for Science Bowl, JETS, and UIL Science. Coach Shah is originally from Calcutta, India and worked in the chemical industry in Buffalo, New York, when he first came to the United States. Since entering the teaching profession, his students and family have taken much of his time, but he feels more pride in his work.

Team Members: Anik Amin, a senior, plans to attend either UC Berkeley or the University of Texas at Austin to major in biochemistry and business. Anik was on the district champion Whiz Quiz team, won first place in regional UIL Chemistry, and is a member of the Math Club, president of the Science Club, a member of JCL, JSA, and the National Honor Society. He is a National Merit Semifinalist Scholar. Anik volunteers at the Red Cross and teaches CPR. Anik has played tennis for the past four years and enjoys playing basketball. Vinay Amin, a senior, will attend the University of Texas at Austin or the University of Pennsylvania next year. He plans to major in biology and hopes to become a doctor. Vinay has been one of the school's top five male tennis players for the past three years. He is on the school's UIL spelling team, a member of Math/Science Club, Distinguished Gentlemen, and the National Honor Society. He is also a National Merit Commended Scholar, and he participates in the Indian Association of North Texas. He enjoys playing basketball and tennis. Jack Eby, a senior, plans to attend the University of Texas, majoring in biomedical engineering. He played varsity tennis for four years and varsity soccer for two years, as well as serving as captain of the soccer team. Jack is involved with Science Club, Math Club, Junior Classical League, and National Honor Society and is a National Merit Commended Scholar and an A.P. Scholar with Honors. He enjoys biology, computers, and any type of physical activity. Tanoy Sinha, a junior, has won a number of math and science awards from local and national competitions. He enjoys many kinds of science, especially physics. Tanoy is a member of Math Club and JSA, and is an AP Scholar. He enjoys having fun with friends and working on DJ mixes.



#### Edmond Home School Coop. / Oklahoma City, Oklahoma National Energy Technology Laboratory - Tulsa



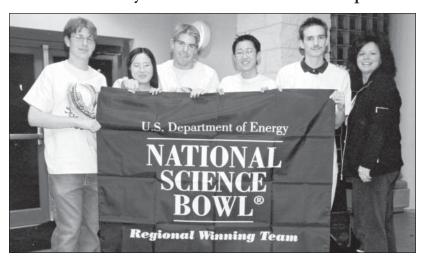
Left to right: Sherri Drwenski (Coach), Geoffrey Whittaker, Matthew Drwenski, Adam Krejci, Alexander Mansour, Josiah Shaw

Team Coach: Sherri Drwenski has been coaching academic teams for four years. In addition to the EHSC High School team, she also coaches a 6/7<sup>th</sup> grade team and co-teaches a class on Middle Ages history to middle school students. Her three favorite scientific discoveries are the internal-combustion engine (carpooling), the microwave oven (how did we live without it?), and the computer chip (email!). In her spare time, she loves to read and spend time with her family.

Team Members: Matthew Drwenski, junior, has been on the EHSC Academic Team for the last four years. As a sophomore, Matt was a member of the Oklahoma All-Star Team, which competed at the Panasonic Academic Challenge in Orlando. He has been involved in drama, JETS, TeenPact, and paging in the Oklahoma House/Senate. He was named to Who's Who the last two years. Matt is an Eagle Scout whose project was building an archery range at a summer camp for inner-city children. Matt enjoys playing guitar and reading. He is undecided on his major and where he will attend college. Adam Krejci is a sophomore and enjoys history, geography and biology. His extracurricular activities include basketball (where he is Junior Varsity captain and holds two MVP's and three All-Americans in the National Homeschool Tournament), JETS Team, TeenPact government classes, band, church youth group, and quiz bowl team. He has volunteered time to coach in basketball camps. He is also listed in Who's Who Among American High School Students. He is currently undecided as to his future education. Alexander Mansour is a sophomore who was named to Who's Who Among American High School Students last year. He has enjoyed being involved in political campaigns and paging in the Oklahoma State House and Senate. He is involved in academic team, choir, drama, and Boy Scouts. He hopes to complete his Eagle Rank this summer. Alexander is planning to attend college and medical school. Josiah Shaw is a sophomore and in his fourth year of academic team competitions. He plays for the OKC Broncos baseball team and participated in the Homeschool World Series last year in San Antonio. He is active in his church youth group and is on the Lifechurch Youth Service Team. Josiah has enjoyed participating in TeenPact, paging in the Oklahoma State Senate, and being involved in several political campaigns. He enjoys playing computers and piano. His future plans include college, possibly majoring in political science or journalism. Geoffrey Whittaker is a junior whose extracurricular activities include band and numerous academic competitions, including the JETS Team Competition and the Rose State Social Studies Bowl. His favorite subjects are English and Japanese. Geoffrey was named to Who's Who Among American High School Students the last two years. He intends to study computer science and become a computer programmer.

#### SCIENCE TO THE CORE

#### Edward W. Clark High School / Las Vegas, Nevada National Nuclear Security Administration – Nevada Operations Office



Left to right: Alex CerJanic, Jing Chen, Donald Bridges, Tom Wang, Zachary Devlin (Captain), Beth Isaacs (Coach)

Team Coach: Beth Isaacs attended the University of Nevada, Las Vegas, and received a Bachelor of Science Degree in May of 1993 and a Master's Degree in Education in 1990. Her love of animals, children and teaching brought her into education. Currently, she teaches biology and zoology at the Academy of Math, Science and Applied Technology located at Clark High School. Important scientific discoveries include AZT – a treatment for HIV infections, Penicillin/antibiotics to treat infections, and the polio vaccination. Her hobbies include watching professional sporting activities, hiking at Zion National State Park, walking her Jack Russell Terriers, coaching Varsity Quiz and reading crime novels while eating Haagen-Dazs chocolate ice cream.

Team Members: Donny Bridges is a senior and captain of the varsity baseball team. He is planning to study political science and go into law. Eventually, as his career goal is to buy a large island on which he will proclaim himself dictator. Alexander CerJanic is a junior who has participated in Marching Band, Wind Ensemble, and Varsity Band throughout high school. He also participates on the school's Robotics Team. Jing Chen, senior, has a wide variety of interests. Her extracurricular activities include tennis and Varsity Quiz. Next year, she is planning to major in computer science in college. She also enjoys learning about biology and physics. Jing is a National Merit Finalist and one of the Valedictorians in her class. Senior Zach Devlin has been participating in the Science Bowl competition for four years. He has also participated in Varsity Quiz competitions for four years. Zach is a National Merit Scholarship Finalist, and he plans to study electrical engineering at the University of Nevada, Las Vegas next year. Tom Wang is a senior who is interested in majoring in computer science at MIT. He is currently one of four Valedictorians at his school, and is President of Mu Alpha Theta and Executive Senator in the student government. In addition, Tom was the programming lead on the FIRST Robotics project. He is particularly interested in the Japanese anime Neon Genesis Evangelion.



## Eight Mile School District / Trenton, North Dakota The Heritage Institute



Left to Right: (seated) Kim Hansell, Casey Moran, (standing) Genna White, Jeremiah LaDue, Brian Hansell, Ruth Folkestad (Coach)

*Team Coach*: Ruth Folkestad earned a B.S. in Mathematics from the University of North Dakota. She has taught 8-12 grade math at Trenton High School for 29 years. She is also Junior Class and Honor Society advisor. She thinks that some of the most important scientific discoveries are the computer, scientific calculators and space travel. Coach Folkestad's hobbies include aqua dynamics, reading and pinochle.

Team Members: Senior Brian Hansell is class President and has been on the Eight Mile School's Science Bowl team for all four years of his high school career. He is an annual honor roll student and attended some classes this year at Williston State College. He also has attended the HOBY (Hugh O'Brien Youth) Leadership Seminar, the Harold Schafer Leadership Seminar and the UConn Mentorship Program. While there, Brian got to visit Yale University and sit in on a few classes. Kimberly Hansell is a junior at Trenton High School, whose favorite classes are choir and physics. This is her first year attending the Native American Science Bowl. She has attended the National Indian Education Conference for the past 2 years. She was selected for the Northern Plains music festival. She is a cheerleader and takes statistics for the volleyball team. After high school, she plans to major in pre-medicine, cosmetology or child care. Junior Jeremiah LaDue has played varsity football for three years, varsity basketball for two years and is a member of the student council. A highlight for him this year was his football team taking third in state. His hobbies include demolition derbies, fishing and working on his pickup. Casey Moran, a junior, is competing in his second Science Bowl. His favorite subjects are science and math. Casey is active in high school rodeo, football, basketball, track and the high school play. He is also a member of FFA. Casey's hobbies include hunting, fishing, team roping, and hanging out with his friends. His future plans are still uncertain at this time. Genna White is a senior at the Eight Mile School District. Her favorite subjects throughout high school have been math and science. Her extracurricular activities include track, volleyball, and choir and drama clubs. Her future plans involve attending college at the University of North Dakota, Grand Forks to major in veterinary medicine. Her career goal is to be a veterinarian before the age of 30.

#### Eldorado High School / Albuquerque, New Mexico Sandia National Laboratories-New Mexico



Left to right: Jacob Searcy, Tom Dimiduk, Daniel Appel, David Dixon (Coach), Chris Cutler, Jeff Dimiduk

Team Coach: David Dixon received B.A. and M.A. degrees from the University of New Mexico. After graduating in Geology, the experience of teaching LaMaze childbirth classes led him back to get education certification. He has been in education for 26 years teaching primarily physics. The last few years he has taken on a new role as Technology Coordinator. In the early '90s he received a 2-year grant to do astronomy research at UNM. During his spare time he is actively involved in wilderness search and rescue and enjoys fly-fishing and woodworking. His wife is an elementary principal. He has five children and six grandchildren.

Team: Daniel Appel, sophomore, has participated in Science Bowl for four years. As a Science Fair participant last year he won Regional and State Awards, Discovery Young Scientist Award and 1st Place in Chemistry at the International Science and Engineering Fair. Daniel has also won a number of awards as a member of High Desert Pipes and Drums Scottish Pipe Band. He participates in Marching Band, JV Soccer (State Champs 2002!) and tennis. Daniel plans to attend New Mexico Tech and study astrophysics. Chris Cutler, a senior, has been involved in a wide range of activities. Last summer he attended the Research Science Institute in Boston. His field of interest is molecular biology, and he hopes to study intra-cellular medicine. Chris is also interested in history and macroeconomics, and his hobbies include rock climbing, reading, and singing. An Eagle Scout in the Boy Scouts of America, he is also a member of the National Honor Society. He plans to attend Brigham Young University after serving a two-year mission for the LDS church. Jeff Dimiduk is a sophomore. He plays bassoon in the wind ensemble and is in Chess Club and S.P.A.C.E. (Students Planning and Conducting Engineering). He enjoys math and science and twice went to National MathCounts and twice placed fourth in a state math competition. He has done Science Bowl since sixth grade and been on two winning state mid-school teams. He has also officiated for Science Bowl the last two years. He is hoping to be valedictorian and attend a top quality college and study math or science. Tom Dimiduk is a junior interested in all science, particularly physics. He is the leader of a S.P.A.C.E. (Students Planning and Conducting Engineering) team studying fuel cells. He was captain of the 1st place NM MathCounts team in 2000. He is on the chess team, plays clarinet, and is in Boy Scouts. For his Eagle Scout volunteer project he organized and built an educational trail with signs for a local science education center. He intends to go to college and study physics, and possibly computer science. He plans to get a doctorate and be a research physicist. Jacob Searcy is a senior involved in many activities including S.P.A.C.E., an Air Force Research Project and Martial Arts (he holds brown belts in Swanda and Ju Jitsu). He is planning on attending New Mexico Tech where he will study astrophysics.



#### Enterprise High School / Redding, California City of Redding Electric Utility



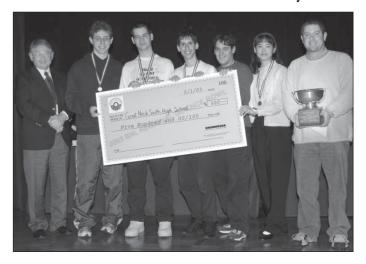
Left to right: Rob Payton (Coach), Anthony Corbelli, Andrew Day, Bryan Carter, Troy Kuersten, Kelly White, David Peek (Head Coach)

*Team Coach:* David Peek received a BS degree in Biology from Humboldt State University. His emphasis was in ecology. He has taught math, science and technology classes during the last ten years. He has taught middle school through adult education. For the last five years, he has been teaching biology at Enterprise High School in Redding, CA. In his free time he cycles, hikes and plays Legos with his three children.

Team Members: Senior Andrew Day has an IQ greater than his body weight. One of his favorite pastimes is the multiplication and simplification of complex metric units in his head (N\*J=(kg\*m\*W/sec)). Doing his physics in engineering notation, he NEVER has to write an exponent in the finalized answer. He is a Museum Teen Volunteer for the local museum — Turtle Bay Exploration Park – where he serves as a member of the Volunteer Leadership Council. He is also a member of the formidable Academic Challenge Team. Andrew plans to become an aeronautical engineer. Bryan Carter is a seventeen-year-old junior. In his spare time Bryan balances his book reading and scientific investigations with cool stuff. For instance, the other day he and fellow student Andrew Day found great joy in exploring the uses of metric prefixes in calculating charges (i.e., .1602 atto Coulombs). This preeminent student is currently opting for Stanford and UC San Diego as potential college abodes. Bryan must give most of the credit concerning his oddities to his mother, who is one of the strangest people to ever walk the planet. Senior Anthony Corbelli is an Italian king of the Geeks, and is the official AP God of Mathematics. He believes calculus is to math as AC/DC is to rock and roll, and in his spare time he enjoys talking about such geeky things as integrals and the beauty of calculus. You can always find him reading, tooling around online or in a discussion about the implications of the aspects of his favorite subject: calculus. Troy Kuersten is a senior who has participated in the Science Olympiad, Academic Challenge, Brain Brawl, Trimathalon, and is an active member of the Enterprise High School Band. He is a future aerospace engineering major and has applied to several universities. This will be his fourth year in the Science Bowl and his third trip to the national competition. Kelly White is a senior at Enterprise High School. She is graduating first in her class of over 200 students. Next year she plans on attending Azusa Pacific University and becoming a neonatal nurse practitioner.



## Great Neck South High School / Great Neck, New York Brookhaven National Laboratory



Left to right: Dr. Peter Paul (Interim Lab Director), Zachary Wissner-Gross, Jared Bass, Kenneth Schultz, Zachary Scherr, Sharon Chou, Matthew Sckalor (Coach)

*Team Coach:* Matthew Sckalor received both his B.S. and M.S. in physics from Rensselaer Polytechnic Institute with minors in astrophysics and psychology. He has taught physics for ten years and coaches the Science Olympiad and Academic teams. His three passions are science, cooking and acting, and his favorite blend of the three is the Food TV show *Good Eats*. He thinks the three most important scientific discoveries are electricity, fire and the TV remote control. Matthew has been an avid physicist since the fourth grade, where he discovered his passion for science.

Team Members: Jared Bass, a senior and salutatorian, has been named National Merit Finalist, Presidential Scholar candidate, and Intel STS Semifinalist this year. He is co-captain of the math team, president of the chess club, vice president of the computer club, a Latin editor of the school foreign language magazine, a member of the school Science Olympiad team and bridge club, and a flutist in the school band. Jared also tutors students in science and math in the school study center. Next year he will be attending Harvard, where he plans to major in mathematics. Sharon Chou, a junior, holds leadership positions in extracurricular math, science, computer, and music programs at her school. As a member of the Nassau County All-Star math team, she scored top 10 in New York State Math League Competition and won the Nassau County Math Tournament twice. She is also a national semifinalist in the 2000 Discovery Young Scientists Competition. Sharon is an accomplished flutist who debuted with the Long Island Philharmonic and played principal flute at the 2003 All-Eastern Symphony Orchestra. Senior Zachary Scherr enjoys courses in higher mathematics, physics and computer science. Zach is currently the president of the computer club, coach of the math team, member of the chess team, and founder of the bridge club. Zach has played the double bass for nine years, and has served as principal of his school orchestra for six years, and principal of a private orchestra for two years. Over the past two years Zach has volunteered for Hadassah, an organization dedicated to raising money for Hadassah Hospital in Israel. Zach plans to go into computer engineering at college. Senior Kenneth D. Schultz, is a national semifinalist in both the Intel and Siemens Westinghouse science competitions for his astrophysics project in which he discovered and analyzed 30 new stars. He is a National Merit Finalist, and received the Harvard Book Award as "the outstanding member" of his class, based on overall academic achievement, leadership, and extracurricular and community service. He is Editor-in-Chief of the school newspaper, President and Founder of the Interact community service club, Vice President of the Science Olympiad team, Captain of the Academic Team, Trip Leader for Harvard Model Congress, and he plays drums. Kenny will attend Harvard next year. Zach Wissner-Gross, a senior and Valedictorian, is a national Pinnacle Scholar, winner of the American Academy of Neurology Neuroscience Research Prize, an Intel finalist, a USAMO qualifier, and USA Math Talent Search Gold and Grand Prize winner. He has been co-captain of his school's undefeated Math Team for two years. Zach is a nationally ranked fencer and captain of his school's undefeated men's fencing team. He has performed with his school opera company for four years, and, as a professional singer, has starred with the New York City Opera and played Amahl in "Amahl and the Night Visitors" at Lincoln Center.

#### Highland High School / Bakersfield, California California State University – Bakersfield



Back, left to right: Dr. Tomás A. Arciniega, Brad Rappleye (Coach), Brian Davis, Jake Ceccarelli, Nick LaValley, Cathy Crosby (Coach), Dr. Thomas Meyer (Coordinator); Front: Erin Rappleye, Chris Quon

Team Coach: Cathy Crosby started teaching 17 years ago when she began to raise her family, after working as a research chemist at UCSD on abnormal hemoglobin, at Stanford on bacterial genetics, and in industry. She has been honored as a Joseph A. Whitehead Educator of Distinction, "Teacher of the Year," and is a technology mentor for Kern County. She also teaches computer science through an Adult Education Program. She has coached Academic Decathlon and Science Bowl for years. She would rank the rise in computer technology, the industrial revolution, and the printing press as monumental discoveries that have impacted man's development. Brad Rappleye graduated from UCLA with a psychology degree. He has taught for 29 years, chaired the Science Department for 18 years, and coached Science Bowl for 11 years. This is the fourth team that he has coached to Nationals. He has been the Swimming coach for 25 years. His high school chemistry and physics teacher, Bob Newbrough, influenced his teaching the most. He ranks Newton's laws of motion, the discovery of radioactivity, and Pasteur's work as most important scientific discoveries.

Team Members: Jake Ceccarelli, a senior, was chosen as Highland's Lad – the top senior boy in academics, athletics, and service. He is ASB President and Chairman of School Site Council this year, and class President for two years. He is an AP Scholar with Honors and is co-valedictorian. He is a four-year football player, a three-year swimmer, and golfer. He has been on the Academic Decathlon team for two years. He hopes to attend an Ivy League college and pursue a career in nanoengineering. Senior Brian Davis is President of Key Club. He was a primary organizer of Highland's participation in Relay for Life. He swims year-round for Riptide Aquatics and is a Varsity swimmer. He has been in orchestra and Math Field Day for four years. He has been on the Academic Decathlon team for two years. He is an AP Scholar with Honors and is co-valedictorian. He hopes to attend Harvey Mudd majoring in physics. Senior Nick LaValley is a four-year football player, a three-year Varsity golfer and is a Scholar Athlete. He served as a class representative and is the Commissioner of Athletes. He has competed in Math Field Day for four years and is President of Science Club. He volunteers daily at a local elementary school. He has been in band for three years and was first chair tuba. He works for a local engineering company and hopes to attend college in Washington majoring in computer engineering. Chris Quon, a junior, is class Vice President. Chris, attended the 1994 National Elementary Chess Championship. He has played alto sax in the band for three years and has been a diver or swimmer for Highland's Swim team. He represented Highland at Freedom's Foundation at Valley Forge and competed this year on the Academic Decathlon team. He is Vice President of California Scholarship Federation. He hopes to attend the University of California and major in engineering. Senior Erin Rappleye was chosen as Highland's Lass - the top senior girl in academics, athletics, and service. She has held office in student government all four years and is ASB Secretary. She has been President of the Interact Service Club for two years and represented Highland at Freedom's Foundation and RYLA. She swims year-round for U.S. Swimming and is a four-year Varsity swimmer serving as the Girl's Swim team captain. Erin will attend Brigham Young University and plans to co-major in microbiology and history.



#### Kennewick High School / Kennewick, Washington

#### Dept. of Energy Richland Operations and Office of River Protection - Tri-Cities



Left to right: Don Fankhauser (Coach), Craig Weidert, Jason Gilmore, Suzanne Hayward, Chris Toomey, Jerry Oelerich

Team Coach: Don Fankhauser is a graduate of Washington State University with a B.S. in Biology and Chemistry and an M.A. from Northwest Nazarene University. His father, a chemistry teacher, was his influence in going into the teaching field. Don has been a teacher for 15 years. He thinks the three most important scientific discoveries are Fleming's accidental discovery of penicillin, nuclear fissioning, and Watson & Crick's discovery of the DNA double-helix. His hobbies are kayaking, running, and playing guitar. Alta P. Thomas earned a B.S. from Montana State in 1962, specializing in biology and chemistry education. The Russians' putting Sputnik into space set off a hue and cry that resulted in her reevaluating her career path in high school. Science classes were always "for fun" classes, art was her serious interest. As an applications chemist, she worked two years for Dow Chemical Company and was awarded a patent for an oven cleaner formulation. The lab was not as rewarding as she had hoped, so she went back to teaching and has never regretted her calling. She earned a Masters in Biology Education in 1991 from Walla Walla College. Vaccines for diseases, unlocking the mystery of DNA and putting a man on the moon are, to her, the three most significant scientific achievements.

Team Members: Senior Jason M. Gilmore is the president of the National Honors Society. He is actively involved in Science Bowl, Science Olympiad, Mock Trial, tennis, and volunteering at a local hospital. His favorite subjects are biology, chemistry, and mathematics. His career interests currently include involvement in the medical field, perhaps in neuroscience. In addition to being an International Baccalaureate (IB) full-diploma candidate, senior Suzanne Hayward plays flute in the school pep band and participates in Knowledge Bowl, Science Olympiad, and tennis. She has been a Girl Scout for thirteen years and recently received her Gold Award. In her free time, she enjoys reading, maintaining her web log, and writing short stories. Suzanne plans to major in astrophysics and one day dreams of working for NASA at the Jet Propulsion Laboratory in California. Jerry Oelerich, a senior, is an IB full-diploma candidate. He is captain of his school's Knowledge Bowl and Science Bowl teams. He is also involved in drama, the International Club, and Science Olympiad. A National Merit Commended Scholar, Jerry will be studying biomedical engineering at Washington State University, the University of Idaho, or Rice University in Houston. Senior Chris Toomey has competed in Science Bowl for two years and this is his first trip to Nationals. He is an IB diploma candidate who enjoys all of his classes, including architecture. He serves as Senior Class Delegate and is a member of the National Honors Society. Chris is also a competitive swimmer and an Eagle Scout, as well as coach for younger swimmers. He plans to study at USC, Duke or Stanford. Craig Weidert is a senior whose favorite subject is math. He is a National Merit Finalist and the vice-president of the National Honors Society. His hobbies include reading, playing the guitar, and playing and coaching soccer. This is his second year participating in Science Bowl. Craig would like to attend the University of Washington or Stanford and study math, computer science, or engineering.

### Lakeside High School / Evans, Georgia

#### Westinghouse Savannah River Company



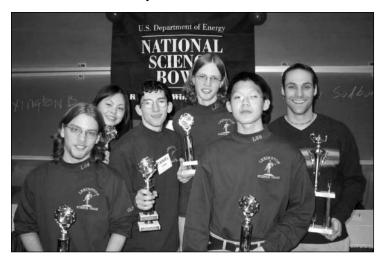
Left to right: Howard Chen, David Tian, Bilal Yousufzai, Steve Ellerbee (Coach), Sagar Bapat, William Diehl

Team Coach: Coach Steve Ellerbee received a degree in chemistry from West Georgia College and a master of education from Georgia State University. His teaching career has lasted for 31 years. He currently teaches Honors Chemistry and Advanced Placement (AP) Chemistry at Lakeside High School. He has been teaching AP Chemistry for 12 years and has really enjoyed that challenge. He believes that his career began by accident and that accident has become a life-long endeavor. The discovery of nuclear fission, the internal combustion engine, and the Internet, according to Steve, have all changed the approach that man has toward his environment and his life.

Team Members: Sagar Bapat, sophomore, has been involved in mathematics and science early in elementary school when he won first place at the regional science fair in fifth grade and then again in seventh grade. At present, Sagar is the producer of Lakeside's morning news show. He is also involved in the Science Olympiad and Math Team as well as in Policy Debate and short story writing. Sagar also competes regionally in tennis. He plans to attend a university in the Boston area and receive a M.D. Ph.D. Afterwards, he plans to do research to find cures for diseases causing epidemics. Senior Po-Hao (Howard) Chen, first began to speak English six years ago when he emigrated from Taiwan. He has been active in competitive academic competitions since middle school. Scoring high in individual competitions held at local and state universities, Howard also excels in science and is currently the captain of Lakeside's Science Olympiad team. He has received gold medals twice in GA State Science Olympiad and numerous medals in regional competitions. Hoping to major in computer science with pre-medicine, Howard is looking forward to Duke or Georgia Tech for higher education. William Diehl is a senior and a participant on Lakeside's Science Olympiad team. He was in scouts until the age of 18. William plans to major in physics at Georgia Tech. He eventually wants to do research in particle physics. His favorite subjects are philosophy, mathematics and physics. He enjoys computer and console gaming, programming (in C, C++, BASIC, 68k, ASM, BF, and Java), reading (especially satires or fantasy), and working with electronics. Senior David Tian is a native of Harbin, China. He moved to the United States at the age of five. David is a prospective valedictorian of his class. Outside the classroom, he is the president of Lakeside High School's chapter of the National Honor Society and Tri-M Music Honor Society. David also loves music and plays the piano and the tuba. He competes on Lakeside's policy debate, science Olympiad, and math teams. As an undergraduate, David plans to major in biomedical engineering. His career goals lie in medical practice and research. Sophomore Bilal Yousufzai's favorite subject is chemistry. He is an active member of his Muslim Youth Group and volunteers at the Golden Harvest food center. Bilal is also a member of the Lakeside Debate team, accumulating eleven awards in seven tournaments. As a member of the Science Olympiad and Science Bowl teams, he strives to expand his scientific horizons and learn more about the world around him. Bilal hopes to find a career in science or politics and make the most of his life.



## Lexington High School / Lexington, Massachusetts University of Southern Maine

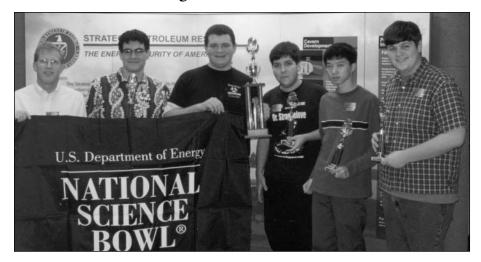


Left to right: Ben Kossak, Shelley Yang, Daniel Lees, Ross Milton, Joseph Chang, John Hogan (Coach)

Team Coach: John Hogan received a B.S. in Physics from Worcester Polytechnic Institute in 1998, along with a minor in Spanish. He has been a physics teacher for five years, with this being his first at Lexington High School. He is one of a number of coaches that work with the LHS Science Olympiad team and is the Varsity Boys tennis coach. He is interested in almost every sport, music, dancing, reading, and many other activities. However, his major passion lies in traveling. And often, the more out of the way the place, the better. He finds it difficult to pin down the most important scientific discoveries in history, but if pressed to choose, one thing that comes to mind would be the electromagnetic generator.

Team Members: Joseph Chang, a freshman, enjoys biology class and his two eternally enigmatic language classes. He currently takes fencing and tennis lessons and participates in science team. Ben Kossak is a junior in his second year as a National Science Bowl® team member. He enjoys writing in his spare time, and appeared in his school's literary magazine, Folio, last year. He is an avid Star Trek fan, with a near-encyclopedic knowledge of the subject, to the admiration and ridicule of his friends. Armed with this, he comes into the competition with Ferengi Rule of Acquisition #65: Win or lose, there's always Hupyrian beetle snuff. Junior Daniel Lees is a member of Lexington's acclaimed debate team. He is also active in the school's computer science team and has been a longtime member of the Investors club. A participant in the AMC and AIME math competitions, Daniel has a strong interest in mathematics, and hopes to enter the field of engineering in college. Ross Milton is a junior and second-year National Science Bowl® member. He enjoys spending the majority of his existence firmly seated in front of his computer. On occasion, he has been known to adjust his weight to maximize comfort. He relishes opportunities to maim his friends in rousing bouts of Unreal Tournament, all without leaving his computer. In addition to his sedentary life in front of the computer, he enjoys relaxing in the field outside his house and being with friends. Above all, he delights in avoiding his homework. Sophomore Shelley Yang is the stereotypical overworked, sleep-deprived, Asian student. Her "free time" is spent rushing through last-minute homework and the expected activities: NOSB, yearbook, Youth Coalition, student senate, and volunteering at a Chinese school. She prizes piano, which she has played for the token eight years, as her "specialty." She has won numerous state piano competitions, frequently performs at Russian nursing homes, and will be performing with the Honors orchestra. Her claim to fame is master procrastinator and her favorite bands include Coldplay, Doves, and Travis. She aspires to attend M.I.T., but if she doesn't get in normally, she'll begin as a janitor, à la Good Will Hunting.

## Louisiana School for Math, Science & Arts / Natchitoches, Louisiana Strategic Petroleum Reserve



Left to right: Dr. Chris Hynes (Coach), Josef Velten, Brian Forbes, Tom Cleveland, Jimmy Tang, Ben Dufour

Team Coach: Dr. Chris Hynes graduated from Oklahoma State University in 1991 with a doctorate in Electroanalytical Chemistry. He was influenced to become a chemistry teacher while teaching in laboratories as a graduate student. Dr. Hynes has worked in several research laboratories over the years, including NASA-Ames, Dow Chemical, and the Howard Hughes Medical Program. He considers the three most important discoveries to be the microscope, Lavosier's work on mass relationships in chemical reactions, and the harnessing of electricity. Dr. Hynes' hobbies are aviation, science, music, and the Dark Ages of Camelot.

Team Members: Thomas Cleveland is a senior whose favorite subjects are physics and biochemistry. He is a member of Mu Alpha Theta, where he is the District Governor. Tom enjoys computer games, programming, and recreational math. He also volunteers as a teacher's assistant in physics. Tom plans to enroll at either Caltech or Tulane University, where he will major in either physics or biophysics. Ben Dufour is a senior. Although math and science are two of his favorite subjects, he also enjoyed Latin. Ben recently obtained the ranking of Eagle Scout, where he was in charge of planting a grove of cypress trees to earn the award. He participates in the Science Club and Mu Alpha Theta. Ideally Ben would like to attend the California Institute of Technology because of its proximity to the Jet Propulsion Laboratory. He is interested in majoring in engineering, or perhaps physics, and would like to work for NASA or become a University Professor. Brian Forbes, a senior, enjoys chemistry and math. He is a prominent member of the Conclave of Fantasy and Science Fiction, and enjoys role-playing and video games. He will attend Louisiana State University in the fall where he plans to study chemistry. Senior Jimmy Tang enjoys many activities in common with his fellow students, including computer programming, billiards, soccer, and piano. Jimmy is a member of the Math Club, Science Club, and Computer Science Club. He plans to major in computer science. Senior Josef Velten is most interested in theoretical physics and would like to attend the University of Chicago/Fermi Laboratory. His favorite subjects include math, science, debate and German. Josef likes to make up jokes and play with phrases, and finds his greatest intellectual stimulation being in a classroom with no class in session. One of his sources of motivation in life comes from "a man with frizzy hair saying that something was impossible". Josef participates in the Science Club, Mu Alpha Theta, and CFS.

#### Lynbrook High School / San Jose, California

#### Sandia National Laboratories - California



Left to right, front row: Carl Babb (Coach), Lisa Bernard, Jimmy Jia, Jichao Qian; back row: John Wan, Alex Lee

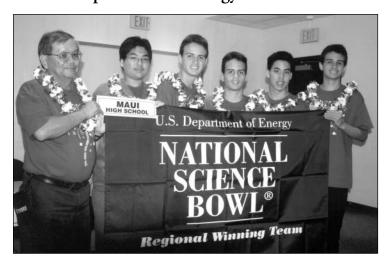
Team Coach: Carl Babb is a veteran teacher of more than twenty years in both high schools and community colleges. He has a B.A. and M.A. in Biology, and teaches biology, chemistry, anatomy and physiology and natural history. He was nominated for Disney Teacher of the Year Award, Presidents Award for Teacher of the Year, elected Teacher of the Year by Capistrano Valley High School students, and appears in "Who's Who Among American Educators." During a leave of absence for a few years, Mr. Babb worked as a technical representative to pharmaceutical companies throughout the United States assisting scientists in drug formulation. His three favorite scientific inventions/discoveries include the plow, fire, and antibiotics.

Team Members: Lisa Bernard, a junior, is a student of astronomy and physics with aspirations of a career in these areas. Lisa's talents are diverse. A competitor in science, math and Japanese, Lisa participated in a National Japanese Competition in April, 2003. She studies Hebrew and French in addition to Japanese. A scholar athlete, she participates in tennis and swimming outside of the classroom. Lisa is a high achiever in whatever she attempts. As Captain of the Science Bowl team, senior Jimmy Jia is responsible for general knowledge in most topics. His general interests lie in mathematics and computer science, evidenced most significantly by his participation in numerous mathematical problems, the USA/Canada Mathcamp and the Math Olympiad Summer Program. He has competed in math for a long time, coded as a hobby even longer, and knows enough biology and chemistry to be useful. Senior Alex Lee is experienced at achievement and student competition. As a member of Math Honors Society, First Place in Parliamentarian Procedures, FBLA, Bay Sectional Level, and accomplished in Discrete Math Research, Alex comes to Science Bowl with an eclectic resume. Alex's interests range from coauthoring a publication in Graph Theory to teaching at the Tech Museum of Innovation in San Jose. Alex received Lynbrook's Outstanding Student Recognition Award. Jichao Qian is a junior. A talented student of science and math, Jichao distinguished himself with a perfect 150 on the 2002-2003 AMC->12. He is a USAMO qualifier and active participant in science and math activities and competitions. An accomplished mathematician, Jichao is also a gifted student of chemistry and biology. John Wan is a sophomore. He is Lynbrook Science Bowl Team's moral officer. He catalyzes laughter among team mates while drawing from his experience in physics, chemistry and biology. A Governor's Scholarship Winner in 2001, John excels in chess, French, Spanish, and U.S. History in addition to math and science.



#### Maui High School / Kahului, Hawaii

#### U.S. Department of Energy - Pacific Liaison



Left to right: Ed Ginoza (Coach), Christian Ling, Nick Jachowski, Matthew Jachowski (Team Captain), Jonathan Nguyen, Daniel Jachowski

Team Coach: Ed Ginoza is a retired chemistry and physics teacher who taught for 31 years in California and Hawaii before retiring in 2000. Today he is a Financial Advisor with AIG/VALIC and a part-time state resource teacher with the Department of Education's Recruitment and Retention Service Section. His primary job with the department is to help teachers pass the PPST math exam, which is required for licensure. His accomplishments include: 1988 Teacher of the Year, Disney's American Teacher Award, 1989; American Chemical Society's 1989 Northwest Regional Award in Teaching High School Chemistry; and the Army Commendation Medal. In 1988-89, three schools in Hawaii built solar cars for the first time. He and the auto shop teacher helped students build one of the first solar cars in Hawaii. He is active in the community as vice chair of the School Community Based Management Team and as a voluntary consultant for the University Center and the Hawaii State Teachers Association. In 2002 his Maui High School Science Bowl Team won its second consecutive regional title. His Ocean Bowl Team also won the State Ocean Bowl competition. He considers the Bohr atom, DNA, theory of relativity, and the invention of the integrated circuit as the most significant discoveries.

Team Members: Christian Ling is a sophomore. Out of all the different sciences, he finds biology and some part of physics to be the most fascinating. He is a proud member of the Maui High School Band and spends many hours trying to wrestle the musical beat that is the French horn into harmonious submission. He is also fond of poetry and sleep. Daniel Jachowski is the only freshman on the team. So far he has had a great year, starting out by placing third in Maui's Cross Country Championships, advancing to the State Science Fair, being part of the State Ocean Sciences Bowl winning team and advancing to the state level of the Ford AAA Travel Challenge. He is active in Math League, and is a trombonist in the Concert Band and a member of the Key Club. Daniel is a novice programmer and is interested in computer science and astronomy. Senior Matt Jachowski in an Intel Science Talent Search Finalist and Siemens-Westinghouse Semifinalist. He won his state Junior Science and Humanities Symposium; garnered awards at the Intel International Science and Engineering Fair, and is on the state champion Ocean Sciences Bowl team. A league cross country "all-star", Matt is also first chair euphonium in the band, Key Club Island Coordinator (one of three in the state), cross country team captain, Math League president, and debate team captain. This fall, Matt will be attending Stanford University where he plans to study physics. Sophomore Nick Jachowski is best known for his science, geography and running exploits. He has the fastest cross-country time in the state this year and enjoys running with his friends. Nick placed second in the 2001 National Geographic Bee and was on the Gold-medal winning team at the 5th International Geographic Olympiad. He captained the winning team in this year's Hawaii Ocean Sciences Bowl; and is a co-founder and editor of Worldwise Worldwide-an on-line geography magazine. This is his second year at the National Science Bowl®, and he will be the captain in the absence of his older brother. Jonathan Nguyen is a sophomore who is participating for his second year in Science Bowl. He has emerged from the depths of Biology and now embraces AP Chemistry and Physics. He volunteers with the Maui High Key Club and plays his alto sax for the Symphonic Band. He is a member of the school's Math League team and enjoys his academic classes.



## Milby High School / Houston, Texas NOBCChE – Houston Chapter



Left to right: JoAnn Akins (front), Shakir Ahmed, Tri Nguyen, Jacqueline Ekeoba, Gabriela Serrambana, Nkechiamaka Nwosu

Team Coach: Shakir Ahmed attended the University of Houston and earned a bachelor's degree in Chemistry. He also got a master's degree in chemical engineering from PV A&M University. His chemistry teacher from high school influenced his decision to become a high school chemistry teacher. He worked as an engineer for two years before he started teaching at Milby High School. He is married with a son. He loves spending time with his son. His likes to dance salsa and play tennis.

Team Members: JoAnn Akins is a senior from Houston, Texas. She is originally from Texas' border state of Louisiana. She takes part in numerous activities around her school and community. JoAnn can be found around campus participating in basketball, volleyball, cross-country, tennis, softball, and track & field. She is an active member of the prestigious National Honor Society, and President of the Fellowship of Christian Athletes organization. Jacqueline Ekeoba is a junior, born in Houston, Texas. She spends most of her leisure time writing poems, essays, and even movies she hopes to produce and direct in the future. She is a member of the Children of the Muse creative writing club at her school. Jacqueline helps out in her church community whenever the opportunity arises. She has won numerous academic awards in her high school years and dreams of becoming mayor of Houston. Tri Nguyen is a junior. He has lived in various places including El Paso, Texas; Brooklyn, New York; and St. Lucia in the Caribbean. Tri plans to attend the University of Houston and study pharmacy. In his free time, he enjoys playing handball, working out, and shooting pool. Although he focuses primarily on academics, Tri still knows when to have fun. Junior Nkechi Nwosu was born in Zambia, which borders South Africa. She spent nine years in Zambia until her family emigrated to the United States in 1997. In late June 1997, her dad died of colon cancer, which devastated her family, but they recovered. Nkechi takes advanced classes at Milby. She is a member of the Mu Alpha Theta Society, National Honor Society, and History Honor Society. Gabriela Serrambana is a junior who spends most of her time doing homework, dancing salsa, and playing soccer. She is the president of the Salsa Club at Milby High School and captain of her soccer team, which won second place in the 2002-2003 YES Tournament.

## Mira Loma High School / Sacramento, California WAPA – Sierra Nevada Region



Left to right: James Hill (Coach), Stephanie Paige, Mark Evans, Joanne Lee, Malini Mahendra, Shahin Zarafshar

Team Coach: James Hill teaches Honors Chemistry and International Baccalaureate (IB) Biology at Mira Loma High School in Sacramento, CA. Before moving to California, he taught upper level science in public schools and junior colleges in Virginia. James received a BS degree from the University of Virginia and a MS degree from Radford University. In addition to being the Science Bowl coach, James is also the Director of the Sacramento Regional Science Olympiad. In his spare time, he enjoys playing piano, photography, reading, and traveling.

Team Members: Mark Evans, a senior, has loved math, science, and foreign languages since he was a child. In high school, this has continued through participation in Mathletes, Science Bowl, and Science Olympiad. He has served as president of Math Club and Supreme Court Justice in Student Government. In addition, he earned his Eagle Scout rank in 2001. He will be attending Pomona College in the fall with planned majors of biology and linguistics. Senior Joanne Lee was born on Nov. 19, 1985 in Van Nuys, Ca. She enjoys yearbook, biology, and Theory of Knowledge at Mira Loma High School. She is co-president of NHS/CSF, was previously the Junior Class Rally Head and is a past vice president of the Woman's Issues Group. Joanne is an attorney on the Mock Trial team and a member of Science Olympiad as well. She has been involved with Science Bowl for the past 3 years. She volunteers with the American Cancer Society and Saddle Pals, a therapeutic horseback riding center for disabled children. Joanne enjoys snowboarding, knitting and cats. She will be attending Harvard University this fall. Malini Mahendra is a senior and has been participating in Science Bowl competitions since she was a freshman. Her favorite subject in school is math because she finds patterns to be fascinating. She enjoys volunteering at the hospital and at the library because it gives her an opportunity to help others and, of course, have fun! This summer she hopes to spend time reading her favorite books and listening to her favorite music while sitting in a hammock. Junior Stephanie Paige is interested in all areas of science and mathematics, especially biology, and would like to pursue a career in epidemiology. Currently she is a candidate for the International Baccalaureate Program Diploma (IB). For fun, she fences, reads and draws. As a volunteer at a local nature center, she teaches basic principles of ecology to young children. She is also a peer tutor and a volunteer in the school's library. She is on the school's Science Olympiad team and is a treasurer in the Art Club. Lastly, she was awarded the Silver Award in Girl Scouting. As an IB diploma candidate, junior Shahin Zarafshar's favorite subjects are science and history, and he also enjoys economics. Having participated for three years on Mira Loma's swimming and water polo teams, he has received the varsity letter each year. Shahin is also a member of the National Honors Society and the National Honor Roll, and he is vice president of Math Club at Mira Loma. Tutoring in the Communities in Schools program, Shahin is also an assistant coach in his recreational swim league. He wishes to attend Stanford or Pomona, and his prospective major is premedicine. Shahin also enjoys relaxation.



# Mississippi School for Math & Science / Columbus, Mississippi Mississippi University for Women



Left to right: Jed Leggett, Philip Taff, William McGehee, Sara Peek, David Fouasnon, Ken Wester (Coach)

Team Coach: Coach Ken Wester received his Bachelor of Science Degree in Biological Engineering and Master in Secondary Science Education from Mississippi State University. He has been teaching physics for 19 years -14 at the Mississippi School for Mathematics and Science. He has coached the school's Science Bowl team for 12 years, advancing to the National Competition 11 times.

Team Members: Junior David Fouasnon, admitted into the Mississippi School for Mathematics and Science (MSMS) this year, participates in Mu Alpha Theta, the Student Environmental Awareness League, Anchor Club, Venturing Crew, and of course, the Science Bowl team. In 2001, Fouasnon earned second place in the Technical Research and Report Writing competition at the national convention for the Technology Student Association (TSA), of which he was an active member and later an elected officer. As a rising freshman, he won Best in State for his entry at the National History Day competition. A piano player of four years, he practices in his spare time. Jed Leggett is a senior and is originally from Purvis, MS. This is his second year participating in Science Bowl. He enjoys playing guitar in his rock band "The West Nihilist Virus," traveling, and hanging out with friends. He is planning to attend Mississippi State University and double major in physics and philosophy. William R. McGehee is an avid junior at MSMS, a residential high school for academically gifted and talented students. He actively participates in many extracurricular activities such as Mu Alpha Theta, Beta Club, Quiz Bowl, SGA Senate, Judo, and, of course, Science Bowl. He is also involved in a research project at Mississippi State University involving airflow through supersonic combustion ramjets and has worked for a petroleum geologist for several years. His future plans include attending a technical institute and working in science research after college. Sara Peek is a junior. Before her acceptance to MSMS, she attended Ocean Springs High School, where she was a member of the varsity cross-country team and the choir. Sara plans to work in aerospace engineering. She is currently part of a team doing research on scramjet engines at Mississippi State University. She would like to work with interstellar spacecraft or the international space station after college. She enjoys science and learning, as well as reading and horseback riding. Senior Philip Taff is an Eagle Scout, and a member of the MSMS SGA and Mu Alpha Theta. He has competed in U.S. Math Talent Search, Math Modeling, AMC, and AIME, as well as various science competitions. He plans to go to a liberal arts school, and then a major research institution for graduate school.

# Montgomery Blair High School / Silver Spring, Maryland U.S. Department Of Energy – Headquarters



Left to right: Tran Pham (Coach), Jared Sagoff, Anran Wang, Stanley (Xinley) Wang, John Shen, Ning Bao

*Team Coach:* Mr. Tran Pham is a chemistry and math teacher at Montgomery Blair High School. He teaches Magnet Chemistry, Physical Chemistry, Analytical and Instrumental Chemistry. He has been at the National Science Bowl a few times, and he enjoys seeing his team in competition.

Team Members: Ning Bao is a junior in the Math, Science, and Computer Science Magnet Program at Montgomery Blair High School. He participates in the Science Bowl, It's Academic!, and Math teams. He has been selected to the elite Team Maryland in It's Academic. When not doing schoolwork or studying, Ning enjoys playing hockey, Ping-Pong, and Go. On weekends, Ning tutors recently arrived Asian students in English and other subject areas. His goal is to attend MIT, where he plans to major in either aerodynamics or artificial intelligence, followed by a career in one of those two areas. Jared Sagoff, a senior, is interested in studying neuroscience in college and is looking to pursue a career in science journalism after college. He is currently a member of Blair's It's Academic! team and is a Managing News Editor for Blair's award-winning newspaper, Silver Chips. In his spare time, he enjoys reading books by S.J. Gould and John McPhee, and envies their prose styles. John Shen is a junior. At school, he enjoys writing and physics classes. He has won several awards at national math and computer science competitions, including Mathcounts, ARML, ACSL, USACO, and MOSP. After school, he attends Math Team as an A-team member. Outside of school, he tutors Chinese-American and American students for volunteer work. He plans to attend a science university on the east coast and pursue a career in nanoscience. He also enjoys guitar, tennis, pool, basketball, and Ultimate Frisbee. Anran Wang is a junior who enjoys biology the most academically, but he also loves music. He has received many honors during his 11 years of piano, and from his participation in Destination Imagination and Ocean Science Bowl. A volunteer at local hospitals, libraries and senior centers, he enjoys being part of the community. He plans to major in genetics and receive his MD/Ph.D. from Stanford University, where he hopes to become a research professor. As a longtime resident of the area and captain of the team, he extends a friendly welcome to teams from afar. Junior Stanley Wang has interests in biology as well as physics and chemistry, and he hopes to apply his knowledge in these fields by becoming a biomedical engineer. Currently, he is the vice president of Blair's Physics Team and Model UN Club. Stanley is a semifinalist of the 2003 USA Biology Olympiad and also a member of the second-place team at the Maryland Ocean Science Bowl. In addition, he enjoys playing trumpet in Blair's jazz band and the community orchestra.

## Morgantown High School / Morgantown, West Virginia National Energy Technology Laboratory-Morgantown



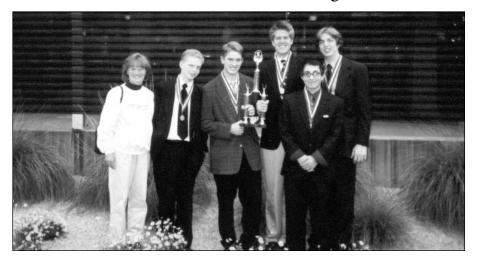
Left to right: Jennifer Zhang, Kenley Jackson, Amy Zu, Chris Oliver, Ben Gleitzman

Team Coach: Carole Mapstone graduated from West Virginia University with Bachelor's and Master's degrees in British Literature and Social Studies. She presently teaches history, psychology, and economics at Morgantown High School. Even though Carole does not teach science, she enjoys learning about it in her spare time, and her husband has been a practicing chemist and her daughter is an avid science student. Carole also enjoys reading detective novels and cookbooks, attending concerts and musicals, and traveling. She thinks three important scientific discoveries are disease-causing germs, DNA, and 3-field agriculture.

Team Members: Junior Ben Gleitzman dabbles in robotics, computing, drama, and rock climbing. He has placed nationally in both JETS and FIRST Robotics, while maintaining positions as Vice-President of Science Honor and Social Studies Club. A member of 4-H for nine years, Ben has been President of his club and has represented West Virginia on the National 4-H Youth Technology Leadership Team. Ben is also the class Treasurer and head of Community Service for his local Jewish Youth Group and has been named "Most Valuable Freshman" in Drama. Ben plans to study computer science or robotics at MIT or Carnegie Mellon University. Kenley Jackson, a junior, has been a member of the Science Bowl team for two years. In her not so spare time, Kenley swims competitively fifteen hours a week, makes lampwork glass beads, and collects vintage fabric. Although more interested in history than science, Kenley's seemingly useless store of random information makes her a valuable team member. Senior Chris Oliver is a well-balanced student who enjoys biology, astronomy, and working with computers. In his spare time, he enjoys skiing, basketball, and lacrosse. Chris also plays trumpet in the Morgantown High School marching band and Wind Ensemble. During the summer of 2001, Chris served as an intern at the NASA Software IV & V facility in Fairmont, WV, where he constructed a Web page database for employees editing space station software. Jennifer Zhang, junior/senior, devotes the majority of her time to most academic clubs and competitions. She is a member of her school's Science and Math Clubs, National Honor Society, Quiz Bowl Team, Social Studies Club, etc. Last spring she was the captain of West Virginia's team to ARML and won several state-wide piano competitions. In addition, Jennifer volunteers weekly at a local hospital. She spends the remainder of her spare time playing with her beautiful golden retriever. Senior Amy Zu is currently the captain of the Science Bowl Team, President of Science Honors, and Secretary of Math Honors. She is a National Merit Finalist and AP Scholar with Distinction. Amy plays first violin in the Pittsburgh, PA, Youth Symphony, took first place at the MTNA State String competition, and was invited to solo with the West Virginia University Community Arts Center Orchestra. Amy also won the Tri-State and Fairmont Concerto Competitions as a pianist. She enjoys volunteering at local senior centers by providing music for the residents. Next year Amy will study chemical engineering at Harvard, MIT, Caltech or Princeton.



## Mountain View High School / Mesa, Arizona WAPA-Desert Southwest Region



Left to right: Anne Edelstein (Coach), Grant Penrod, Kevin Teeling, Braden Anderson, Sean Cooke, J. Parker Heiner

Team Coach: Anne Edelstein is a native Arizonan, 3rd generation. She graduated from Arizona State University with a B.S. in Zoology and a M.Ed. in Secondary Ed/Science. Prior to teaching, she worked for a veterinarian and as a volunteer for the Phoenix Zoo. She started teaching after her three children entered grade school. She also worked with students as a Math Count coach, on Science Fairs and Science Olympiad. She is married with three children who are now grown and in college, the Peace Corps and the work force. Her three most important scientific discoveries: 1. Discovery of penicillin 2. The Human Genome Project 3. the Theory of Evolution.

Team Members: Returning to Nationals for his second time, senior Braden Anderson is this year's team captain. Studying AP Physics this year has not only helped him in Science Bowl, but also given him the opportunity to discharge nine volts from a capacitor across his tongue. In theory, AP calculus BC should be helpful too, but generally a class in numerical intuition would be much more useful. Fortunately, Braden is studying the latter independently, in addition to Greek and Latin roots, as the team's random-derived answer specialist. This fall, he will enroll at Brigham Young University to pursue a chemical engineering degree. Go Cougars! Junior Sean Cooke was born on March 26, 1986. Ever since he was a little boy he has always loved science, especially the study of animals. He has played in the high school concert band and even holds a position at Living Word Bible Church as a band director. Sean has also served as both sentinel and President in his local FFA chapter. He loves flying, and he wants to attend Embry Riddle in Prescott, Arizona, and go on to become a commercial pilot. Sean is glad to help represent his school and give all his thanks to God. I. Parker Heiner, a senior, is a master of Japanese swordsmanship and looks forward to the opportunity to challenge other practitioners to battles at the National Science Bowl competition. Furthermore, he asserts that  $\Pi$  = 7 and dares anyone to challenge his claim. Herr Heiner speaks fluent German, Japanese, and Mandarin. He wants to own stuff. Senior Grant Penrod, in addition to participating in Science Bowl, is a member of a jazz septet, the Speech and Debate team, and a state-winning Academic Decathlon team. He is the Vice President of the Decathlon and the former co-president of the swing dancing club. Grant does volunteer work at the local library as a member of the Young Adult Advisory Council. He enjoys science, needless to say, and plans to major in Physics in college, progressing to earn a Ph.D. and become a university professor. Kevin Teeling, a 16-year old senior, is a National Merit Kinecist. He plays saxophone, clarinet, guitar, and piano and is in his second year of Academic Decathlon. His somewhat masochistic enjoyment of math has led him to Arizona State University, where he will begin his pursuit of a double major in mathematics and philosophy in the fall. Eventually he wants to be a college professor of some sort.



## Newton North High School / Newton, Massachusetts Brown University



Left to right: Yinfeng Shao, Gregory Yu, Gregory Peterfreund, Lickkong Tam, Hiroaki Tanaka, David Newburg (Coach)

Team Coach: David Newburg (Coach) attended University of Massachusetts, (B.S. Chemistry), and Boston University (Ph.D. Biochemistry). He is currently involved in biomedical research in Glycobiology, specializing in carbohydrate cell surface structure and function. He chose science because it allows testing hypotheses directly rather than relying on being judged by a consensus of 'experts'; thus, it is the most democratic of disciplines. He spends most of his time in a research laboratory; he teaches by choice. Coach Newburg admires the discovery of operant conditioning, especially the power of intermittent negative reinforcement. Recent discoveries on prefrontal cortex function (personality traits and many types of abstract reasoning) may help to produce great Science Bowl competitors.

Team Members: Gregory Peterfreund is a senior. Beyond captaining the science team at numerous competitions, he also does part-time research at a Boston University Medical Center laboratory as a technician and data analyst. His college plans are not yet set, but he plans on becoming pre-med and studying molecular biology and biochemistry. YinFeng Shao is a junior who is captain of the school's math team and is on the Eastern Massachusetts ARML team. Yin is also active in Science Olympiad and JETS and is on the school's gymnastics team. In his spare time he enjoys breakdancing and listening to Asian pop. This summer he will be attending the Ross Mathematics Program as a junior counselor. In the future he hopes to study electrical engineering, computer science or mathematics. Lickkong Tam, a senior, would like to thank his parents, his grandparents and God for allowing him to get as far as he has. He enjoys GNFOS, meeting new people, and Hayao Miyazaki films, but dislikes blurbs. Talk to him for more information. Junior Hiroaki Tanaka was born in 1986. He is a musician and built a xylophone for the Science Olympiad competition. He also participates on Newton North's Mock Trials team. Greg Yu, a senior, is a member of the Newton North Science Team and captain of the Math Team. His favorite subjects are math and science, and he plans on majoring in computer science at MIT next fall. As a National Merit scholarship finalist and winner of the Bausch and Lomb Honorary Science Award, Greg is dedicated to academics, while still finding time to relax and play computer games.



### New Trier High School / Winnetka, Illinois Motorola



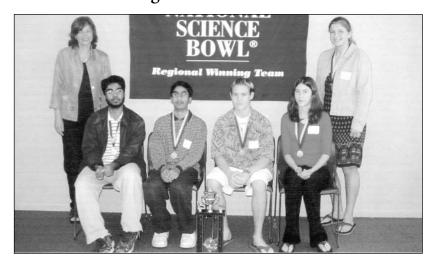
Left to right: Rey Moré (Motorola), Colin Davy, Sam Altschul, Matt Keenan, Thomas Koberda, Maria Jabon, David Reinstein (Coach)

Team Coach: Brent Williamson graduated from Indiana University and has an M.S. from Purdue University in Chemistry Education. He became a science teacher because he had fun in his high school science classes. He had a partnership for ten years with Inland Steel, where he taught chemistry in the morning and worked as an analytical chemist in the afternoon. His teams have won two Illinois Science Bowls and five Illinois Science Olympiad tournaments. He has also been the Illinois State Director and the National Director for Science Olympiad.

Team Members: Sam Altschul, a senior, is the son of a visiting nurse and a civil rights attorney. He is a kind, thoughtful individual who owns a cat. Colin Davy, a senior, hopes to go into engineering in college. As captain of the policy debate team, he spends most of his weekends competing across the country, currently maintaining a winning record. He also spends much of his time competing in Scholastic Bowl, where he recently qualified for Team Illinois to go and compete nationally in Florida in the Panasonic Academic Challenge in June. Maria Jabon is a senior who loves math and science and hopes to become an electrical engineer. She spends most of her free time designing and building various electrical or mechanical devices for the Science Olympiad Competition, such as a Rube Goldberg-type device and a robot. Last year when her team made it to National competition, Maria placed first in Mission Possible, the Rube Goldberg device event and third in Scrambler, another engineering event. Other than designing and building, Maria also enjoys running, cross-country skiing, biking, cooking, babysitting, and attending plays at the Chicago Shakespeare Theater. Aside from biology, senior Matt Keenan has many other interests, most of which are not science-related. He is keenly interested in history, current events, and economics, and he plans to study international relations in the future. He has been involved with Scholastic Bowl for the past four years, and will compete in Florida in June. He is also an avid reader who enjoys playing the clarinet and traveling. Thomas Koberda, the captain, is a senior. This is his second year at the national tournament. He is passionate about math and science, and his many activities include Science Olympiad, Math Team, JETS/WYSE, mathematical research, mathematical modeling, the Physics Olympiad, and the Chemistry Olympiad. He has received numerous distinctions. He also enjoys philology/linguistics, classical music, various sports and gourmet cooking. He will probably attend the University of Chicago next fall and is planning an academic career in theoretical mathematics.



## Niceville High School / Niceville, Florida Eglin Air Force Base



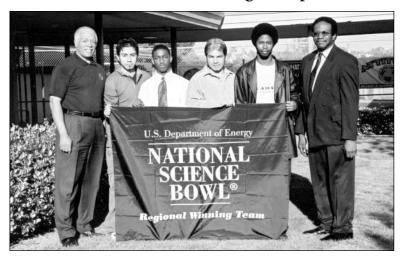
Left to right: Carol Moreau (Coach), Ibraheem Mohammed (Captain), Yahya Mohammed, David Borah (alternate), Lyndsey Keen, Meghan Brown

Team Coach: Carol Moreau has been coaching the Niceville "Eagle Rays" for four years now. A former native of Connecticut, she taught at the Bridgeport Regional Vocational Aquaculture School. She migrated to the warm waters of Florida five years ago and was inducted into "Who's Who Among American High School Teachers" this year by a former student who is doing her graduate work in marine archaeology. She holds Masters degrees in both biology and environmental science and has taught for 20 years. She is ALWAYS wearing a marine critter of some sort, loves to dive, and of course, her "Eagle Rays."

Team Members: Sophomore David Borah is a hardworking, fun loving, and involved student. He juggles extracurricular activities, church, and work. He has been recognized by Okaloosa County as "Honor Student" and has lettered in academics. David is involved with his church by being a junior camp counselor for summer confirmation retreats. David has also kept the same part-time job for two consecutive years. David at only 15 is a certified diver who is avid about the ocean. His interests are surfing, wakeboarding, diving, and being with friends and family. Meghan Brown, a senior, has demonstrated excellence in her science studies. In tenth grade she was awarded a scuba diving course for maintaining an average in Marine Science of 103%!! She would like to study radiology at the University of West Florida after graduation. Meanwhile, she's involved in many school activities, work, and community service. Senior Lyndsey Keen is a science enthusiast and is especially interested in marine and environmental sciences. She loves the ocean and its many wonders, and she plans to major in science/biology next year in college. Lyndsey has excelled in every science class throughout her career. In 10th grade she attended governor's school and completed a project on the effects of rainfall in the Carvin's Cove watershed. In 12th grade she completed a project on the effects of salinity on various grass types. Lyndsey was also on the team that won the Regional Marine Science Bowl this year. Ibraheem Mohammed (captain), a senior, has won more than 150 awards in math and science at the regional, state, national and international levels. He has won place awards and special awards from NASA and the U.S. Patent and Trademark Office at the International Science and Engineering Fair for exploring natural methods to combat bacterial resistance to antibiotics. He developed patentable techniques to prevent biofilm formation on catheters for which he was named one of the top 40 young scientists in the nation by the Science Talent Search, often called the "Junior Nobel Prize." He presented his findings of a vaccine design for human parvovirus B19 at the 2002 International Virology Conference. He was qualified to take AIME for 4 years and USAMO in 9th grade. Yahya Mohammed, a freshman, has won numerous awards in math and science at the regional, state, and national level. He was one of 40 national finalists in the 2002 Discovery Channel Young Scientist Challenge and received the Smithsonian Institution's "Young Naturalist Award." He was a Duke's Talent Identification Program National Winner. At the state Science and Engineering Fair of Florida he made history by winning the Grand Award three years in a row. He is a member of the winning Regional Marine Science Hurricane Bowl team from Niceville High School. He has qualified to take AIME (American Invitational Mathematics Examination) in 8th and 9th grades. His hobbies include gardening and video editing.



## NOBCChE / San Diego, California NOBCChE – San Diego Chapter



Left to right: Robert Countryman (NOBCChE San Diego DOE Coordinator), Julio Diaz, Damien Robinson, Julian Sonderegger, Michael Bento, Philip Dabney (Coach); Not pictured: Richard LaMar Williams II

*Team Coach:* Philip Dabney earned his B.A. in Biology from the University of Dayton in Dayton, Ohio in 1971. He served in the Navy for 22 years as a Surface Naval Officer and has been teaching for seven years as a middle school and high school science teacher. He has done two summer internships in microbiology at the University of California, San Diego. Mr. Dabney has been coaching the San Diego Science Bowl team for three years. He thinks the three most important scientific discoveries are nuclear fission, computers, and DNA.

Team Members: Michael Bento, a senior at La Jolla High School has had a passion for science since he was a child. His favorite subjects are biochemistry and physiology. He was a first place winner in the Greater San Diego Science and Engineering Fair in the field of Microbiology. He has been involved in NOBCChE since seventh grade. Michael is active in community and social issues. He is a member of Youth Organizing Communities, and treasurer of the African American Club at La Jolla High School. He plans on attending college in California. Julio Diaz is a senior at High Tech High School. During his first year of high school he began to enjoy science, mainly biology. During high school he competed in Science Fairs, winning both first and second place. He has competed in the Greater San Diego Science and Engineering Fair and the National Organization of Black Chemists and Chemical Engineers (NOBCChE) Science Fair for the last four years. Looking for a challenge during his senior year, he decided to join NOBCChE's Science Bowl, which has led to the DOE National Science Bowl. Julio's future plans are to major in biological sciences and to attend a private college in California. Damien Robinson, a junior at Francis W. Parker, is on a full academic scholarship. He is currently the Vice President of the Umoja Society, President of the Progressive District Baptist State Ushers Association and Bible Instructor of the State of California Youth Ushers Association. Damien's awards include the Sigma Gamma Rho young male role model of the year, the Union Tribune athletic and academic scholarship. He is also five-time recipient of the Golden Pyramid Scholar award. He has participated in the NOBCChE science competition for the past four years. Damien is also an active member at Macedonia Missionary Baptist Church, where he is a junior deacon, serves on the usher board and sings in the choir. He looks forward to attending the University of Miami, majoring in chemical engineering. Julian Sonderegger is a sophomore at La Jolla High School. He is a Life Scout and is currently receiving his Scuba Diving Certificate. He has been in NOBCChE for 4 years and has won 2<sup>nd</sup> nationally. He enjoys snowboarding, and snow camping. He is a member of the Jazz Ensemble at La Jolla High. He plans on attending the Air Force Academy or UCSD. Julian would like to get a PhD in biology. Richard LaMar Williams II is a senior at Gompers Secondary School. His favorite subjects are English, math, and science. He enjoys football, reading and video games and plans on majoring in computer science, then owning his own video game company. He has been a member of NOBCChE for four years and participated in the DOE National Science Bowl Competition last year. Richard plans on attending one of the UC California system schools.

## North Hollywood High School / North Hollywood, California Los Angeles Department of Water and Power



Left to right: Lillian Kawasaki (Env. Affairs and Economic Development), Stephen Yao, Ed Marti (Captain), Nick Zheng, Randall Delling (Principal), Alberta Yen, Len Soloff (Coach), Zahra Yazdani, Walter Zeisl (Communications–Green LA), Estela Bueno (Science Bowl Volunteer Committee)

Team Coach: Coach Len Soloff loves to teach. He is going on 35 years in the classroom. Mr. Soloff holds a MS degree in chemistry from UCLA. He enjoys chess and bridge. He was involved in a research project, "O Atom in Addition to Small Olefins." Many years ago he worked on catalytic converters at UCLA. To him the three greatest discoveries were: the Rutherford atom, Shroedinger's work and Einstein's Theory of Relativity.

Team Members: Senior Edward Marti's favorite subjects include chemistry, physics, astronomy, and mathematics. He enjoys playing chess, tennis, Ultimate Frisbee, computer games, and Counter-Strike, and using Linux. He is planning on majoring in math, chemistry, or maybe physics. He is president of Math Club, an AP National Scholar, and US National Chemistry Olympiad Finalist (High Honors). This is his second year at the National Science Bowl. Stephen Yao, junior, has played tennis and been in the California Scholarship Federation for three years. He currently participates in a chess club. He is looking forward to his senior year and to college. Senior Zahra Yazdani is a multitalented student. She is a National Merit Finalist and a National AP Scholar. Her favorite activities include playing musical instruments and certain computer games with random mathematical formulas. Her favorite sport is basketball. She considers Science Bowl to be an academic version of basketball. In the future, she hopes to specialize in math, biology, or perhaps both. Alberta Yen, a senior, is Captain of the Science Olympiad team and a co-principal flutist in the Colburn Orchestra da Camera. As an active volunteer for the Los Angles Public Library for the past four years, she has helped organize special presentations and raise funds for the library through its used bookstore. Alberta is a National Merit Finalist and an Advance Placement National Scholar. Although she currently plans to study biology in college and pursue a career in neurosurgery, she also wants to pursue her interests in music, good food, and camping at college as well. Senior Nick Zheng likes trance music, playing citerati on Yahoo! and playing chess. His short-term goals include doing well at the 2003 Science Bowl National Competition. In college, Nick will major in biology.

## Oregon Episcopal School / Portland, Oregon Bonneville Power Administration

Photo not available

Team Coach: Coach Bill Lamb received a BS in chemistry from Millsaps College, Jackson, MS, in 1966, and an MS (1974) and Ph.D. (1975) in science education from the University of Texas at Austin. He became a science teacher almost by accident as a result of his chemistry Ph.D. dissertation research being "scooped" (published in the journal literature) by a Florida chemist who was working independently on the same project. At that point, he took a one-year high school teaching appointment in order to take a year off from grad school in chemistry, fell in love with teaching, and changed directions from chemistry to science education. In addition to graduate research in both chemistry and science education, he has worked as an analytical chemist for the Texas State Dept. of Health, and most recently participated in the QuarkNet project, which included a summer of research-related activities in high energy physics at the University of Oregon in Eugene. In addition, he has been directing his students in independent research, with the result that many of them have won recognition in national research competitions such as the Intel Science Talent Search, the International Science and Engineering Fair, the Junior Science and Humanities Symposium, and the Siemens-Westinghouse Science & Technology competition. The most important scientific discoveries haven't been made yet; he has no idea what they will be, but looks forward to learning about them. His alternate profession is as a musician; he is a not very highly paid jazz and rock and roll keyboardist. His hobbies include gardening, reading pulp fiction (mysteries, science fiction, lawyers, action), and politics.

Team Members: Thomas Bennett is a senior who plays soccer and lacrosse, was Captain of the Mock Trial team, has acted in several school plays and was a National Merit Finalist. He is also Treasurer of the Student Council and has volunteered at the Oregon Food Bank. Next year, Thomas plans to attend an East Coast college yet to be determined where he hopes to study either philosophy or political science. Junior Erik Garbacik first participated in the Science Bowl in 8th grade, where his team won the Middle School Regional Science Bowl. This is his fourth year participating. His main interest is in physics, but he also enjoys chemistry, playing his guitars and competing on his school's Varsity tennis team. Ryna Karnik, a junior, participates in a variety of extracurricular activities, including horseback riding, fencing and tutoring children who speak English as a second language. She is the student chair of ASAC, the administrative committee of the tutorial program. She is in the process of completing a 2-year research study which she will present at ISEF. Ryna is debating whether to pursue a career in engineering or medicine, and plans to apply to a broad range of colleges next year. Andrew Platt is a senior who enjoys science. He has won numerous awards for his science projects, including a Siemens-Westinghouse Semi-Finalist Award. He runs track and cross-country, and is on Varsity for both. He plans on attending either Williams College or Yale University next year.



## Parkview High School / Lilburn, Georgia Georgia College and State University



Left to right: Ryan P. Queen (Coach), Travis Board, Hemant Ramachandran, Lucas Bronson Bermudez, Henry Xu, Ana Catalina Posada

Team Coach: Coach Ryan Queen has been teaching gifted biology at Parkview for 6 years. He earned a Bachelor of Science degree in Biology and a secondary science teacher certification from Oglethorpe University in Atlanta, Georgia and a Masters of Education degree in Science Education from Georgia State University, also in Atlanta. In addition to Science Bowl, Mr. Queen assists in coaching the academic team and fast-pitch softball. He considers the three most important scientific discoveries/events to be Fleming's discovery of Penicillin, the astronomical observations of Tycho Brahe, and the birth of Albert Einstein. When not teaching, coaching academic teams, or preparing for either of the two, Mr. Queen enjoys relaxing and spending time with his wife, Kim, and new daughter, Blakely.

Team Members: Sophomore Lucas Bermudez is exceedingly excited about his first trip to Washington D.C., for science is one of his favorite subjects. Extracurricular activities of his include Scholars Bowl, Math Team, Beta Club, and Mu Alpha Theta. Lucas tries to round himself out by playing classical guitar and piano, reading, and training through Shaolin Kung Fu. He plans on attending Georgia Tech and majoring in mechanical engineering. He hopes to one day win the Nobel Prize for having made a tremendous impact on science and the world. Senior Travis Board is attending Georgia Tech as a freshman beginning the fall semester of 2003. Travis plans on majoring in chemical engineering. His favorite subject in school is chemistry. Travis has been involved in Science Bowl as well as Science Olympiad for two years. He was also a member of the National Honors Society, BETA Club, and Mu Alpha Theta. Senior Ana Catalina Posada is a National Merit Finalist and a native-born Colombian. She is the vice-president of Parkview's Mu Alpha Theta and the activities director of Parkview's chapter of JCL. Ana is also involved in Science Olympiad, Quiz Bowl, National Honor Society, and Beta Club. She volunteers as an ASL/CASE interpreter for her church. She plans to major in genetics and plans on receiving a PhD from M.I.T. in genetics. This is Ana's fourth year participating in the National Science Bowl® competition. As far as plans for the future, Ana just wants to be happy and content in everything that she does. Hemant Ramachandran is a junior who has had the privilege of coming to Nationals for the past three years. His favorite class is computer programming because there is no homework. He enjoys listening to rap, eating, sleeping, playing video games, and having fun. He has no idea where he is going to go to college. Henry Xu is a sophomore whose favorite subjects are math and chemistry. He actively participates in the school Quiz Bowl team and Math team as well as Science Bowl, and is a member of both Mu Alpha Theta and Beta Club. Henry currently plans to go to Harvard or MIT majoring in either medicine or engineering.

## Pembroke Hill School / Kansas City, Missouri Honeywell – Kansas City Plant



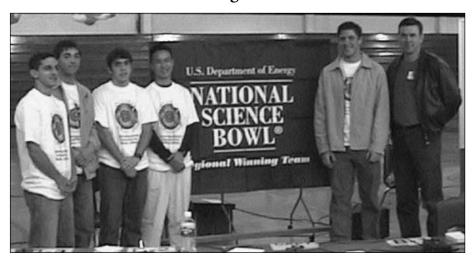
Left to right: Laura Myron, Jeff Sigler, Neil Khare, Jacob Mays, Gail Williams, Stephen Fried, Meg Moore

Team Coach: Meg Moore attended the University of Missouri-Columbia, where she majored in biology with a minor in chemistry. She is also an eternal graduate student, as she takes courses with no specific direction, ranging from nuclear science to genetics. This is one of the main reasons she is a teacher, because she is always learning from her students and more in her subject area. She has been a teacher for the past seven years, where she has taught a variety of courses ranging from chemistry to general biology to microbiology. Her extracurricular activities include coaching Science Bowl and mentoring students on independent research. In her free time, she enjoys travel, photography, outdoor activities, reading and home improvement projects. In her opinion, the most important discoveries in science have been: Robert Koch's work on Bacillus anthracis to develop the germ theory of disease, Charles Darwin's lifetime work on evolution, and Galileo Galilei's observations on the phases of Venus and the moon that strengthened the Copernican revolution. Jeffrey L. Sigler earned his Bachelor's Degree in Chemistry at the University of Missouri at Kansas City. His experience in his first chemistry class influenced him to become a science teacher. He found the subject interesting after putting in hard work to learn it. The three most important scientific "discoveries" are the development of the scientific method, DNA, and the Zero candy bar.

Team Members: Stephen Fried is a sophomore who enjoys scientific study (especially molecular genetics), mathematics, and French. He is an active member on the elite Science Olympiad team with biology events. As a freshman he was inducted into the Who's Who Among America's Best High School Students. Stephen participates in Math Club, and the Philharmonic Youth Symphony of Kansas City. He plans to become either a geneticist or the king of America. In the latter case, he would pass a law that would give students the right to sue teachers that assign work in an unconstitutional, cruel, or unusual manner. In the former case, he would pursue scientific study in his favorite subject. Neil Khare, a senior, has received All-State recognition in football, basketball, and baseball and is an All-American fencer. He has been recruited by Stanford University to pitch but will most likely accept a six-year, \$89M contract to play shortstop with the Boston Red Sox. Neil hopes to be the President of the United States one day. Jacob Mays is a senior. At the Pembroke Hill School, senior Laura Myron has played Varsity field hockey and soccer, served two years as the President of the Spanish Club, been a member of the Pembroke Hill Youth in Government Delegation, served as a Campus Guide and written for the school newspaper, *The Voice*. She has received many academic honors, including membership in the Cum Laude Honor Society, and the Wellesley and Harvard Books Awards. She volunteers at the Women's Foundation of Kansas City and tutors students at University Academy. In the future, she plans to attend college and pursue a career in molecular biophysics, fine art or political theory. Gail Williams, a senior, has been involved in Science Bowl since her sophomore year. Other extracurricular activities include the drama department, Science Olympiad, and serving as captain of two Varsity sports teams. A severe asthmatic, Gail enjoys complaining and saying the phrase "Lonnie Wells."

## SCIENCE TO THE CORE

## Peter Johansen High School / Modesto, California Modesto Irrigation District



Left to right: Simon Shamass, Chris Gouveia, Giovanni Mendoza, Thomas Li, Richard Ludlow, Dan Iverson (Coach)

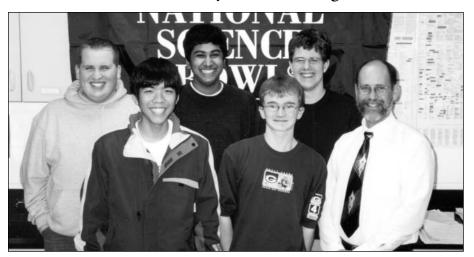
*Team Coach:* **Dan Iverson** earned his B.S. in Biology from Evangel University. He has been teaching biology and chemistry for the past 24 years, the last eleven years at Peter Johansen High School in Modesto. In addition to school-related events, he enjoys the outdoors in many ways, especially when shared with family. Another favorite pastime is reading, of which his most recent book was <u>Asking the Right Questions</u>, by Dr. Phillip Johnson

Team Members: Senior Chris Gouveia likes his food. Don't be mistaken; he's one fit dude. Chris Gouveia loves his baseball, but when he plays he tends to fall. He sometimes worries that his leather pants will rip, or that his house will run out of bean dip. He participates in many things, and sometimes pretends he's the Lord of the Rings. Chris Gouveia loves tuna and chicken sandwiches, he has dreams of fame and many riches. This year Chris hopes to graduate and not choke when he forgets to masticate. Senior Thomas Li—This young cat's all frills and thrills. Heartthrob of all the pretty young girls. On the track, he runs so strong. Master clarinetist, plays a funky song. Astronomy is his love, his specialty... Such is the man known as Thomas Li. Senior Richard Ludlow—a man above men. With leadership parallel to the great William Wallace, of Johansen's fab-five, he is the tallest. On the Richter scale, Dick measures a ten. Speech has made him a maestro of equivocation, but it's the many hours at track, and time spent at the squat rack, that have made him the king of muscle striation. He specializes in biology and math. A fitness nut, he's not big on Pepsi, but his sleeping habits make some assume narcolepsy. If Dick's leading, you're on the right path. The synergistic effect of senior Giovanni Mendoza's personality and smile is sure to send your electrons into another orbital. One glance at this National Merit Scholar's karyotype will make your temperature rise, and your kinetic energy increase in direct proportion. You'd be MITy impressed by his future endeavors, including majoring in bioengineering at—you guessed it—MIT. But Giovanni is more than a periodic table. You might hypothesize that he puts the "func" in functional group. His foci are physics and chemistry, and his knowledge in these two fields will grab you by the fulcrum. Senior Simon Shamass is a master of witty conversation; to call him a comedian is no exaggeration. He excels in the classroom as well as on the track; neither motivation nor talent does this young man lack. His crowning accomplishment sits as a medal on his wall; that hurdling league championship—when he dusted them all. Earth science and biology are his scientific fortés; he'll conquer your team like the mighty Cortez. Simon has two major goals in his life: to become a doctor and find a hot wife.



#### Poudre High School / Fort Collins, Colorado

WAPA - Rocky Mountain Region



Left to right: David Hayes, Tatsuya Sakurai, Ashwin Murthy, Mike Grinolds, Daniel Gilsdorf, Jack Lundt (Coach)

Team Coach: Coach Jack Lundt is a chemistry teacher who graduated from Colorado State University with a BS in Biology and Chemistry, and has taught science for 25 years. He became a teacher to help students enjoy, appreciate, and understand the practical applications of science and math. He grew up in a family where both parents and grandparents were teachers and he married a teacher, so teaching seemed his destiny. He is a veteran of national competitions, having taken students to the National Science Bowl®, the National Science Olympiad, and the National Ocean Sciences Bowl. He loves to hunt and fish, so his spare time is spent getting high in the Colorado Rockies with his llamas. Einstein's formula E=mc², Watson and Crick's DNA model, and Tesla's discovery of alternating current are the scientific discoveries he considers some of the most important.

Team Members: Daniel Gilsdorf, a senior, is in the International Baccalaureate program. His favorite activities include soccer and fishing, which he doggedly pursues in spite of a remarkable lack of skill. He also participates in Science Olympiad, and is the reigning National Champion in Cowabungee. He thinks he is planning to major in biochemistry but has not yet decided on a college. Favorite subjects include biology, chemistry, and history. Mike Grinolds, a junior in the International Baccalaureate Program, also attends Colorado State University for math classes and is currently taking Partial Differential Equations. As a science enthusiast, he is taking higher level chemistry (a three year course) and standard level physics (a two year course). Along with his studies, Mike participates in Science Bowl, Science Olympiad, and National Ocean Sciences Bowl. In his spare time, he enjoys playing with hydrofluoric acid, winning the lottery, and augmenting the decadence of society. David Hayes, a junior in the International Baccalaureate program, enjoys participating in Science Bowl, Science Olympiad, National Ocean Sciences Bowl, and FIRST Robotics. Other activities he enjoys include sitting blank-faced in front of the computer, watching movies, reading textbooks, eating, and sleeping. He has no specific plans for the future, but one day hopes to write a book about himself exclusively in third person. He thinks it would be a smashing success! Ashwin Murthy, a junior, is in the International Baccalaureate program. His hobbies are tennis, computer games, and watching movies. His favorite subjects are history, chemistry, and physics. He also has received his Black Belt in Tae-Kwon-Do. Tatsuya Sakurai, a junior in the International Baccalaureate program, has a multitude of interests. These include conversing online, fashioning dynamic Web pages, minesweeping, and honing the subtle art of procrastination. He also derives pleasure from Science Olympiad and FIRST Robotics. In addition to science, he finds music irresistible - he plays the piano and clarinet. He was accepted into the All-State Band.



#### Pullman High School / Pullman, Washington

#### Dept. of Energy Richland Operations & Office of River Protection - Spokane



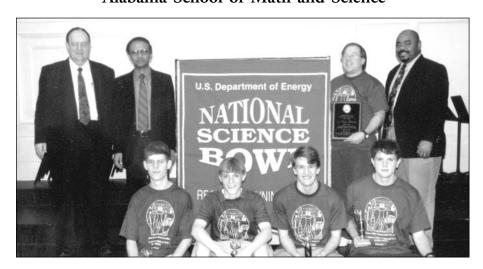
Left to right: Liyang Chen, Chad Tang, Morwan Osman, David Kahn, Andy Hou

Team Coach: Barbara Clark Harding has held a variety of chemistry-related positions over many years. She received a B.S. in Chemistry from Allegheny College, worked as an organic synthesis chemist and as a laboratory technician in genetics and pharmacy, and as a teacher at levels ranging from middle school to university. She spent over ten years as the lecture-demonstrator for the Department of Chemistry at Washington State University, doing the fun "magic" that kept the large lecture classes awake. Since 1996, she has taught chemistry and AP chemistry at Pullman High School. She also coaches the Knowledge Bowl team and works with the Highly Capable program. Barbara and her husband enjoy the outdoors, particularly hiking and skiing. Their house is in a constant state of remodeling, now that their two children are grown.

Team Members: Liyang Chen is a senior who plans to attend the University of Washington, where he will major in electrical engineering. He participates in Math Team and Knowledge Bowl, and plays the violin and piano. Andy Hou is a junior who enjoys taking math and science classes. He is a member of Math Team, plays tennis, and also plays the piano. In his spare time, Andy likes to write programs in C for his TI-89 and V200 calculators. David Kahn is a senior and a bona fide, card-carrying math nerd with a love of animals and a hatred of censorship. President of the David Kahn Fan Cult, David's early education consisted largely of Calvin and Hobbes and The Far Side cartoons, supplemented by Monty Python and Red Dwarf. This has given him an excessively unique perspective on the world. David plans on being around for the future when it happens, but has managed to give as little thought as possible to it other than that. Morwan Osman is a senior whose college plans are uncertain at this time. In addition to his interest in science, he is an aspiring thespian. He hopes to eventually join the establishment and make copious quantities of cash. Chad Tang is a senior who will probably be going to Case Western, majoring in biomedical engineering. Chad is Vice-President of the Key Club, and also participates in Math Team and Knowledge Bowl. This is the second trip to the national competition for Liyang, David and Chad.



## Randolph School / Huntsville, Alabama Alabama School of Math and Science



Left to right (From top): Moderator Dr. Albert Lilly, Coordinator Dr. Garin Wattuhewa, Coach Robert Wayne Mullins, Assoc. Director Mr. Derek Gandy; Bottom: Tom Burwell, Tristan Call, Peter Jones, Jack Padley

Team Coach: Robert Wayne Mullins has a B.S. in Physics from University of Memphis and a M.S. in Physics from the University of Alabama. He enjoys working with high school students because they have more courage and less anxiety towards learning math and science. He was the 1994 AAPT Teacher of the Year for Tennessee. His favorite scientists are James Maxwell, Richard Feynman, and Dr. Salk for his life devotion to eliminating children's troubles with polio. Mr. Mullins prays that at the end of his life his existence has made the world a better place through the accomplishments of his students.

Team Members: Thomas Burwell, a junior, lived in Huntsville all his life and attended Randolph since kindergarten. His favorite courses are math and physics. He participates in Science Olympiad, varsity baseball and golf, and also plays the piano. He plans to major in math or physics at college. Tristan Call, a junior, is the founder of the HAPPY Club at Randolph School, and a member of the school Honor Council. He enjoys the performing arts, plays piano and runs cross country and track. Junior Peter Jones' extracurricular activities include two years on the school's varsity track team and three years on the ice hockey team. Peter has participated in his school choir throughout high school and performs in local musical productions with a Huntsville independent music school. His future plans involve attending Vanderbilt University and majoring in neuroscience. Jack Padley is a junior who is currently involved in Science Olympiad. He runs cross country and outdoor track. He is also a founding member of the school's frisbee club. During the summer he volunteers at a local charity, and during the school year he volunteers for the Red Cross. He wants to get a degree in chemistry and become a doctor.



## Renaissance High School / Detroit, Michigan NOBCChE – Detroit Chapter



Left to right: Shaundra Crittenden, Quantez Pressley, Jerell Henderson, Desiree McLain

Team Coach: Cynthia Bridges has been teaching INS, Advance Chemistry and AP Chemistry at Renaissance High School (National Blue Ribbon School) for 13 years. She is a graduate of both Clark Atlanta University, where she obtained a B.S. in Chemistry and the University of Massachusetts where she obtained her M.Ed. Her decision to teach was stemmed by her desire to see more minorities pursue a chemistry major. In addition to teaching, her publication, The Analysis of Synthetic Cycloalkylated Nucleotides Using Reversed Phase HPLC, appeared in the 1988 edition of the Journal of Chromatography. The mother of two children and a Christian, her hobbies include bowling, aerobics, crafts.

Team Members: Shaundra Crittenden is a sophomore with a full schedule. Her extra-curricular activities include cheerleading and gymnastics. She is also a member of the Student Senate and Model U.N. She is an active member of Student Government, including her participation in the Michigan Youth in Government Spring Conference and The Conference on National Affairs. Shaundra plans to attend either Duke or Yale University. A seventeen-year-old junior and devout Christian, Danyel Currie is the youth chairperson at her church. She frequently participates in volunteer work at church and school. She tutors fellow students and has a love of math, creative writing, and chemistry. She plans to become an international bestselling author of fiction novels. Currently, she participates in French Club, BAMN-an organization fighting for integration and equality, and Math Club. She plans to rejoin her academic games team next year and to be inducted into the National Honor Society. Sophomore Jerell Henderson has excelled at his work as a student, and as a person. He actively volunteers at the Children's Museum, attends an engineering program called DAPCEP, and is an active member at his church. His extracurricular activities also include being a member of Student Government and participating in Science Olympiad. He plans to attend Xavier University. Desiree' McLain is a junior and first year Science Quiz Bowl participant. Her extracurricular activities include the Detroit Public Schools Gifted and Talented Program, Class Treasurer, STATIC Christian Club, and Building with Books, and she holds an after school job at Old Navy Outlet. She plans to attend the University of Michigan and major in economics with an emphasis in pre-med. She is undecided on a career. Quantez Pressley, a junior, is an active member of the Student Senate and Michigan Youth in Government. Presently he is running for the seat of Governor in Michigan Youth in Government. His extracurricular activities include singing with the school choir. He plans to attend Howard University and major in political science.

## Saratoga Springs High School / Saratoga Springs, New York Knolls Atomic and General Electric



Left to right: Nate Molteni, Jon Hatlee, Sarah Markus, Steve Cotts (Coach), David Chudzicki, Casian Monaco

Team Coach: Steve Cotts is coaching the Saratoga Springs High School for the second year; he has been spoiled by the good fortune of working with bright, talented students who have earned a trip to Nationals each of those two years. After receiving his Bachelors and Masters degrees from Cornell University, Steve began teaching high school physics in 1986, and he has never looked back. Steve became interested in teaching largely through his parents' love of learning and teaching. Outside of the classroom, his interests include backcountry skiing, cycling, and taking long walks on the beach.

Team Members: David Chudzicki, senior, spends weekends with friends competing in chess tournaments, and taking long walks on the beach. He also serves on the board of, and several committees for, the regional Unitarian Universalist organization and enjoys traveling to frequent weekend meetings. David eagerly plans to attend Swarthmore College and is considering majors in math, physics, linguistics, philosophy, and political science. Senior Jon Hatlee is a hard-working and dedicated student whose favorite subjects include physics, calculus, and most especially study hall, because most of the time he prefers to do nothing at all. He is currently the President of the Saratoga Springs LEO's Club, an active member of his school's Academic Team, and is a member of his high school's Student Council. Outside of school, Jon enjoys spending his time playing the violin, playing Frisbee, volunteering at a local elementary school, and taking long walks on the beach. After high school, Jon plans on studying civil engineering at Clarkson University. Captain Sarah Markus, a senior, is yet again the only female member of the Saratoga team. She takes pride in her ability to simultaneously destroy male egos, coordinate the team's outfits, and pack up the team's buzzer system. She is a big fan of math and science. She runs, plays lacrosse, Frisbee, violin and piano, and runs some more in her spare time. She enjoys sleeping in class and taking long walks on the beach. Summed up in one word, Sarah is a munchkin. Nathan Molteni is a junior. Favoring math and history, he also tends to dabble in physics and the occasional Latin translation. He participates on the school's Academic Team, Science Bowl, Model UN, and hopes to establish a debate team. He is an avid cellist and volunteers twice a month at a museum. Nate also enjoys taking long walks on the beach. Senior Casian Monaco is an ambitious young man seeking an adventurous future. He is the secretary of the National Honor Society, a varsity athlete in lacrosse and soccer, captain of the Environthon Science team and an active participant in the local SGEK's club. Casian's first goal following high school is to tackle the uncharted hills of Greenwich New York with a number of first ski descents. He also plans many long walks on the beach. Ultimately though, Casian wishes to save the human race with a miraculous discovery of a cure for AIDS in his profession of choice, biomedical engineering.

#### SCIENCE TO THE CORE

## Sault Area High School / Sault Ste. Marie, Michigan The Heritage Institute



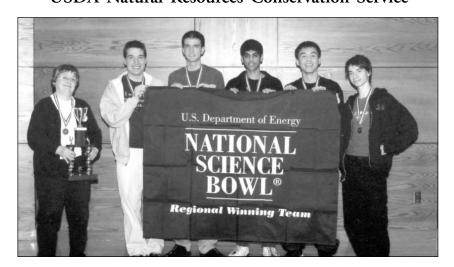
Left to right, back row: Lori King (Math Coach), Mike Kennedy, Jason Steinhaus front row: Melanie Perron, Jill King, Jaclyn Goetz

Team Coaches: John Howell (computers, not pictured) earned his B.A. in History at Lake Superior State University. He has been teaching for the Sault Area Public Schools for four years. John is currently working on his master's degree in special education. This is John's second year working with the Intertribal Science Bowl in the area of computer science. Lori King earned her B.S. in Mathematics Education from the University of Wisconsin–River Falls. She has been teaching for Sault Area Public Schools for the past five years. Lori has coached teams in the Intertribal Science Bowl for the past four years. Nick Smith (science, not pictured) is presently attending Lake Superior State University for a Bachelor of Science Degree in Chemistry. He has competed as a student in the Intertribal Science Bowl previously. Future plans are to pursue his Ph.D. in analytical chemistry.

Team: Jaclyn Goetz is a junior with an interest in physical therapy. She has not yet determined which university she will attend. Jaclyn has worked with the Tribal Contact Health Services for the past three years. Her hobbies include horseback riding, painting and being an active member of her church worship team. Mike Kennedy, junior, has been a member of the track team throughout high school. He has an interest in becoming a pilot and is currently taking flying lessons. Mike's other interests are playing guitar and working in construction. Jill King is a senior who plans to attend Lake Superior State University with a major in elementary education. Jill currently has a high school class site placement working with elementary students. Her other interests are drawing, computers and reading; she also works 30 hours per week at a local grocery store. Jill participated on the 2000 Intertribal Science Bowl team as a freshman. Melanie Perron, senior, will be attending Lake Superior State University this fall. Her plan is to transfer to Ferris State in Michigan after two years and complete her Doctor of Pharmacology. Melanie is a returning member of last year's Intertribal Science Bowl team. She is also a second-year member of the high school Volleyball Varsity team and is in her second year working for a local insurance company. Melanie's hobbies are painting ceramics, rollerblading and swimming. Jason Steinhaus (captain) is a senior and a returning member of last year's Intertribal Science Bowl team. He plans to attend Dartmouth College this fall, majoring in an undetermined area of science. Jason is presently very active in high school, being a member of the Ecology Club, the Junior Rotary, Senior Executive Committee, BPA and the high school Quiz Bowl. His hobbies include the culinary arts and playing Risk with his friends.



## Shawnee Mission South High School / Overland Park, Kansas USDA Natural Resources Conservation Service



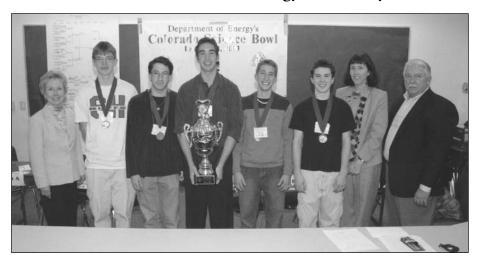
Left to right: Coach, Karen Smith, John Moreau, Jeremy Stack-Ellsworth, Amar Gupta, Yi Guo, and Aaron Goldblatt

Team Coach: Karen Smith has been a science teacher since 1964. She enjoys seeing young people set goals and work to achieve them. She has degrees from Ottawa University, Ottawa, Kansas, and Emporia State University in Emporia, Kansas. Her hobbies include traveling and observing nature. The three most important scientific discoveries in her opinion, are the atom, DNA, and Newton's laws.

Team Members: Senior Aaron Goldblatt enjoys learning, Science Olympiad, writing, and Science Bowl. He enjoys biology, German, European history, Japanese, English, and calculus. He plans on becoming a cellular biologist. Senior Yi Guo has been in Science Bowl for two years and has served as team C captain. Science Olympiad, Chess Club, and Latin Club are some of his extracurricular activities. Yi's hobbies include soccer, billiards, and basketball. Currently, Yi is undecided about where to attend college. Amar Gupta, a senior, is captain of his school's Science Bowl, Science Olympiad, Categories, and Academic Decathlon teams. He is a National Merit Finalist, and is planning on attending the J. D. Edwards Honors Program at the University of Nebraska-Lincoln. His future plans include double-majoring in engineering and business and working in a research and development-related field. John Moreau, senior, is excited to be going to nationals his first year of Science Bowl. He is a National Merit Finalist, Swim Team Captain, Academic Decathlon Captain and State Champion, and founder of the German Club. His is also highly involved in politics. John will be attending Arizona State next year, where he will be studying aerospace engineering. His favorite element is francium, and his favorite constellation is Cassiopeia. Jeremy Stack-Ellsworth, senior, has participated in Science Bowl and Olympiad since freshman year. He is a member of the National Honor Society. He enjoys math and many sciences. He will go to the University of Nebraska-Lincoln for the J. D. Edwards Honors Program in Computer Science and Management next year.

## Smoky Hill High School / Aurora, Colorado

#### National Renewable Energy Laboratory



Left to right: Joan Jansch (Coach), Chris Krueger, Joel Rosenthal, Andy Artz, Nathan Artz, Anthony Eskridge, Mary Bartholomew (Coach), DOE- Golden Field Office Manager: John Kersten

Team Coach: Co-coach Mary Bartholomew has taught chemistry for 20 years, since completing a M.S. degree in Analytical Chemistry at the University of Denver. Mary has taught college prep chemistry and AP/IB chemistry. Her mother, who was also a chemistry teacher, was her mentor. Her oldest son has benefited from technological developments in computers and neurology that have enabled him to hear with a cochlear implant. A board member of the Colorado Chapter of the Alexander Graham Bell Association for the Deaf and Hard of Hearing, she is an active advocate for individuals with a hearing loss. In her spare time, she loves to read and garden. Co-coach Joan Jansch has a B.S. from Iowa State University and a M.A. from the University of Colorado. She has taught IB Biology HL and college Prep Biology. She abandoned a nursing career and did research on antibiotic resistance in Staphylococcus aureus prior to teaching. She has two adult children, and was recently married. Her hobbies are gardening, reading, running, and biking. She believes that the scientific discoveries that changed society are Darwin's theory of natural selection, Newton's laws of motion and the invention of the birth control pill. She loves teaching high school because teens are receptive to new ideas, energetic, beautiful and interesting.

Team Members: Andy Artz is a senior who enjoys bowling for science and answering "basalt" to random earth science questions. At 17, he plans to go to college, though his instincts favor giving the tuition costs to a random homeless person. He hopes for a bright future with seven children. He wants to contribute to science by demonstrating the existence of cool ohms in an electric field. Nathan Artz is a sophomore. He plays varsity/club soccer, runs track, and when he gets time plays in piano recitals and takes private lessons. He has postulated myriad formulae regarding the unequal correlation between the 0 and its conjugate using the modern theory of Calculus, and would like to say that MacLaurin should not have an equation named after him. Anthony Eskridge, a sophomore, is currently taking AP Chemistry along with AP Calculus BC. He is an alto saxophone player in numerous bands at Smoky Hill, including the marching, concert, and jazz bands. He takes part in the Junior Classical League and math club. He spends his time playing clarinet and bass guitar and coding Perl. He has developed a method of solving equations in which both sides are multiplied by zero, establishing the equation to be true for all real numbers. Sophomore Chris Krueger's favorite activities include sleeping and eating. He is on the JV lacrosse team where he plays defense. He enjoys procrastinating and antagonizing his English teacher. Joel Rosenthal, an IB junior, has a diverse variety of interests both in and out of school. Fascinated with languages, history, and geography - as well as math, science, and technology - Joel finds it difficult to fit into any traditional stereotype. Joel is a black belt in karate, where he exhibits a variety of leadership positions. He is considering the many college and career options available to him and wishes to make a difference in whatever field he may choose.



# Soda Springs High School / Soda Springs, Idaho U.S. Department of Energy – Idaho Operations



Left to right: Dave Howell (Coach), Kevin Hoopes, Merin Tigert, Zack Zander, Chase Johnson, Tianna Jensen

Team Coach: Dave Howell attended Brigham Young University and received a degree in counseling. He enjoys working with young people and has great confidence in their abilities. He enjoys all sports and especially hunting, fishing, backpacking and being outdoors. He also likes to spend time with his family. Three scientific discoveries he feels are important are the computer, the telescope and DNA/genetics.

Team Members: Junior Kevin Hoopes says his favorite classes are calculus and chemistry, in that order. He also enjoys anything related to computers. Kevin plans to attend college at a yet unknown Utah university and major in Cisco networking. Tianna Jensen, a senior, has participated in National Honor Society, Drama Club, Show Choir and three musical plays. She has been on the high honor roll each of her four years of high school and has received honors in French, geometry, psychology and Show Choir. Tianna was named an Idaho Top Scholar and a member of Who's Who Among American High School Students. Upon graduation in the spring, she plans to pursue a Bachelor of Science degree in mechanical engineering at the University of Idaho, where she has already been accepted to attend and take part in the Honors Program. Chase Johnson, a junior, lists his favorite subjects as calculus and science. He participates in Business Professionals of America, National Honor Society and pep band. He would like to become an aeronautical engineer. Merin Tigert is a senior and unlike most other teenagers. Her favorite subjects are acting, welding, English and science. She has been honored as freshman of the year, outstanding art student, outstanding welding student, and she was recently inducted into the National Honor Society. Merin has also held several offices including Drama Club secretary, Junior Class president, FFA vice-president, cross country co-captain and INEEL Scholastic Tournament team captain. She has also been involved in many service organizations. Merin is still undecided on which university to attend but is considering degrees in conservation biology, fine arts or a welding certification program. Zack Zander is a sophomore whose favorite subjects have always been math and science. He received a medal in sixth grade for being a national science Olympian. He plans to major in pre-med and eventually go to medical school. At the conclusion of his studies he would like to be a general practitioner and surgeon. He would like to attend Washington University in St. Louis.

## Southside High School / Fort Smith, Arkansas Russellville School District & Arkansas Tech University



Left to right: Josh Adams (Coach), Luke Weiler, Steven Jennings, Andrew Kincannon, Rory Bradney, Nic Schluterman

Team Coach: Coach Josh Adams earned a B.S. in Physics in 1996, and a M.A.T in Secondary Education in 1999, both from the University of Arkansas, Fayetteville. He became a teacher because of his interest in astronomy and his positive experience during his graduate student time of teaching to the underclassmen. He has been at Southside for three years, and is in his fourth year of teaching. Besides Science Bowl, he also sponsors Quiz Bowl and co-sponsors Robotics. He thinks the three most important scientific discoveries are the telescope, the transistor, and Kevlar. Coach Adams enjoys racquetball, reading, and amateur astronomy.

Team Members: Rory Bradney, a senior, enjoys spending time in extracurricular activities. This is his second year as a member of Quiz Bowl. He enjoys reading scientific periodicals and books and watching movies. Rory plans to attend the University of Arkansas where he will major in chemical engineering. He aspires to enter the medical or pharmaceutical research field. Steven Jennings, a senior, is a returning member of the regional winning team from Southside last year. His favorite subjects are math and science. He is a member of KMO, National Honor Society, Quiz Bowl, Student Tutoring Club, Physics Club, AP English Club, Biology Club, Mu Alpha Theta, and the Ultimate Frisbee Organization. He is also active in a local Boy Scout troop and recently gained the standing of Eagle Scout. He is thinking of going to the University of Arkansas and majoring in some type of chemical or biological engineering. He then hopes to either go on to graduate or medical school. Andrew Kincannon, a senior, enjoys many extracurricular activities. This is his fourth year as a member of the soccer team and second on the Quiz Bowl team. He is also an Eagle Scout and a National Merit Finalist who is not sure which college he will attend next year. Nic Schluterman, a sophomore, has interests ranging from music to coloring. He is a member of band and Nancies, and volunteers his time at a hospital and helping with a local MathCounts team. In unoccupied time, Nic enjoys canoeing, playing guitar, and coloring in coloring books, where he applies his unique Fauvistic approach. Another good chunk of life is spent in front of the television. Plans for the future are fairly open; Nic would like to study to become either a secondary level teacher or a caterpillar. Luke Weiler, a senior, is greatly involved in his school's academic competitions. He has won four separate state titles, and placed tenth in Accounting II at the 2002 National FBLA convention. Luke plans to attend the University of Arkansas next year and double major in electrical engineering and mathematics and minor in history. He is a member of Quiz Bowl, Mu Alpha Theta, Physics Club (President), AP English Club, FBLA, National Honor Society, and KMO, and he was a National Merit Finalist. In his spare time, Luke enjoys taking long walks by the shore (yes, even in Arkansas), watching sunsets, reading romance novels, and Pre-Raphaelite and Cubist approaches to coloring.



## Stevens High School / Rapid City, South Dakota WAPA – Huron



Left to right: Barb Gulk (Coach), Andrew Bockover, Andrew Thomas, Gideon Oakes, Luke Pendo

Team Coach: Barbara Gulk is in her second year of coaching the Stevens High Knowledge Bowl team which also includes the Science & Quiz Bowl teams. She gives complete credit to the group of students she works with and believes that their knowledge and ability is a direct tribute to themselves, their parents and their teachers. Her primary job has been being a "Mom". She attended the National College of Business and, while raising a family, has been employed in the business and accounting field with a special interest in income tax. The scientific discoveries that she feels are most important are penicillin, electricity and computers. She enjoys golf, bowling, fishing for walleye, and spending time with her family.

Team Members: Andrew Bockover, a junior, has been involved in various science-related activities for his entire high school career. He has won several gold and silver medals at the South Dakota Science Olympiad, and placed first in the Biology category at the South Dakota School of Mines and Technology science contest. He plans to go to college somewhere. Junior Gideon Oakes home schooled through fourth grade, and has participated in local and regional Spelling and Geography Bees, Odyssey of the Mind, and the South Dakota State Language Exam. He has been active in Teenage Republicans for seven years, holding various positions including County Chairman and State Secretary. Gideon started and runs Rushmore Online, an Internet Service Provider, which serves most of western South Dakota. He also designs and hosts Web sites. He hopes to attend Brigham Young University where he will major in mass communications with an emphasis in broadcasting. Luke Pendo, a junior, is definitely going to pursue a career in physics and mathematics. He is a long-time member on his school's Knowledge Bowl team. An avid reader, he has a wide variety of knowledge on many subjects. Andrew Thomas, a junior, has been on the school's Knowledge Bowl team for three years. He currently has no plans for the future.

## Taylor Allderdice High School / Pittsburgh, Pennsylvania National Energy Technology Laboratory – Pittsburgh



Left to right: Vlad Grigorescu, Gina Pacciti-Barone (Coach), Marilyn Michelow, Matthew Meisel (Captain), Joshua Levenson, Andrew Bartholomew

Team Coach: Gina Pacitti-Barone teaches first-year honors chemistry and AP chemistry at Taylor Allderdice High School. Besides coaching the school's Science Bowl team to two national competitions, she has coached the Junior Engineers and Science Olympiad teams to regional victories. Her students have annually placed in the Pittsburgh Chapter of the American Chemistry Society Examination. She is also the boys' track coach at Allderdice and guided them to their third-ever victory at the City League Championships in 2002.

Team Members: Senior Andrew Bartholomew is involved in several underground school clubs, including the school Creative Writing Magazine, Gay-Straight Axis, Philosophy Club, Fencing Team and Ultimate Frisbee Team. During his senior year he became leader of the Philosophy Club, molding it to his own whims and desires. His more legit activities include Math Team, Leadership and three years in the Allderdice Spring Musical. He also participates in the Three Rivers Urban Youth Corps of the Student Conservation Association. He is undecided about his college decision at this time. Vlad Grigorescu is the sophomore in the group. He participates in various clubs, such as First Robotics, Math Team, Science Olympiad, PA Junior Academy of Sciences, and the boy's tennis team. His interests are computer science and mathematics. Joshua Levenson is a senior. He is the defending doubles tennis champion in the City League and a singles semi-finalist. Joshua has been a four-year member of the schools' academic competition squads such as Math Team, Junior Engineers, and currently serves as captain of the Science Olympiad. Joshua is the News Editor of the school newspaper and has distinguished himself as a writer having published an article in the Fall 2002 Edition of Public Voices for Public Schools. He has co-created the Stranger Danger Awareness Program to teach elementary school students about strangers and the dangers they pose. Joshua will attend Amherst College and continue his pursuits in science-related fields. Matthew Meisel, Captain, is a senior and a two-year attendee of the National Science Bowl®. He has lettered in cross country, swimming, and track, and has placed in the City League Championships in all three sports. Matthew also competes for Allderdice's math team, Science Olympiad team, and Hometown High-Q team. Matthew serves as the school newspaper's editor-in-chief. He is a National Merit finalist and will attend Harvard University in the fall. Senior Marilyn Michelow is a captain and four-year varsity member of both the girl's tennis and lacrosse teams. Marilyn is a member of Allderdice's Science Olympiad team, math team, Junior Engineers, leadership, Pennsylvania Junior Academy of Sciences and the National Honor Society. Last year, she was proud to publish an abstract in a pediatric pathology journal as the culmination of a three-year research project. Marilyn is a National Merit finalist and will attend Princeton University in the fall, where she hopes to further pursue her love of science.

# Thomas Jefferson High School for Science & Technology / Alexandria, Virginia Thomas Jefferson National Accelerator Facility

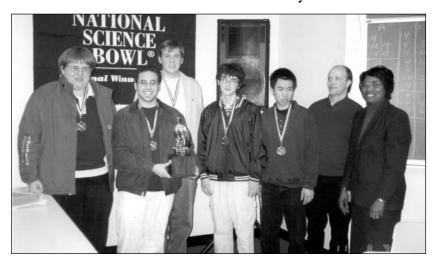


Left to right: Michael Zhang, Sumanth Ravipati, Paul Yang, My-Linh Nguyen, Katherine (Kay) Aull, Eric Price, Sharon Baker (Coach)

Team Coach: Sharon Baker teaches mathematics and computer science at TJHSST. She graduated from the University of Virginia in Charlottesville with a B.A. in Mathematics and an M. Ed. in Mathematics Education. An enthusiastic mathematics professor at UVA inspired Ms. Baker to pursue mathematics as a major, and ultimately to consider teaching. She sponsors the Fellowship of Christian Athletes and Science Bowl clubs at TJ. Her hobbies include skiing, travel, and music.

Team Members: Kay Aull, junior, was on the 2002 National Science Bowl® championship team. Her itchy buzzer finger has also earned international wins with It's Academic!. She is the founder of the school biology team and a member of the computer team. Though a scientist at heart, she edits for the school philosophy magazine, has won a state speech team championship, and ranked 6th nationwide on the National French Exam. She also combines skill with service, organizing a workshop series to encourage female participation in science and programming a population genetics simulator for the AP Biology lab. Bioengineering is her intended field. Senior My-Linh Nguyen enjoys good literature and running. She divides her time between tutoring and volunteering at a local hospital; any surplus time she devotes to learning new computer languages. As a junior, Linh was invited to the chemistry Olympiad Study camp. Her college destination is unknown. Sumanth Ravipati, a senior, is a first-time Science Olympiad participant. He is a member of the school's varsity math team and plays the clarinet in the school band. In his spare time, he plays intramural basketball, tennis, and Ultimate Frisbee. He has volunteered at the local hospital for the past four years. He aspires to become an ophthalmologist and actively participate in medical research. Paul Yang is a junior who regularly attends math and computer team meetings. He has strong interests in computer science and chemistry. Junior Michael Zhang participates in math team, computer team, and physics team. His favorite subjects are chemistry and physics. He participated in the Mathematical Olympiad Summer Program in the summer of 2002. His extracurricular activities include volunteering at the library and intramural basketball. His goal is to study chemistry and physics at MIT.

## W.G. Enloe High School / Raleigh, North Carolina North Carolina Central University/NORTEL



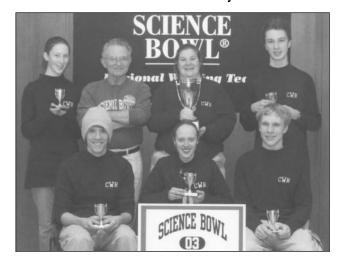
Left to right: Hartley Grimes, Eric Schwartz, Brent Dorr, Alex Sheppard, Edward Su, Brian Wood (Coach), Dr. Bernice Johnson (Dean, College of Arts and Sciences)

Team Coach: Coach Brian Wood teaches biology and genetics and a variety of other courses. He earned an MS from NCSU in zoology in 1986 and recently completed national board certification. He enjoys the "practice" of science and uses lab experiences to have students realize that science not only takes knowledge but practice, persistence and patience to understand the dynamics of life. When he is not in the classroom he will probably be watching his kids play soccer or directing a youth function at his church.

Team Members: Junior Brent Dorr is Secretary of the Enloe chapter of the National Forensics League, a member of the Enloe Science Olympiad team, a competitor in the American Computer Science League and a member of the Enloe chapter of Mu Alpha Theta. His aspirations for the future are to attend a university for medicine and eventually become a doctor. Senior Hartley Ray Grimes, 18, is from Raleigh, North Carolina. He will be attending North Carolina State University next fall and is planning to major in computer science or physics. He would like to major in both, seeing as to how he has an elevated interest in both of these fields. He enjoys programming, fixing, tweaking, and just plain messing around with computers. It is a hobby that he would like to expand upon. At the same time he has a keen interest in science (his parents, both being scientists, probably contributed to this), specifically modern physics. In the future, he would like to seek a doctoral degree in one of these areas. Eric Schwartz is a senior, and plans to study audio engineering at the University of Miami after graduation. He has a strong interest in music; much of his free time is spent playing guitar and piano, composing music, and giving lessons. He also is strongly involved with his synagogue youth group, which he is president of this year. Alex Sheppard is a junior.



## Washington High School / Cedar Rapids, Iowa Ames Laboratory



Front, left to right: Jake Thomas, Ashley Noreuil and Aaron McDowell; Back: Krystal Garringer, Ames Laboratory Director Tom Barton, Coach Heather Adams and Jeff Barnes

Team Coach: Heather Adams, Academic Coach, holds undergraduate degrees in Biology and Psychology from the University of Iowa, and a graduate degree in Teaching from Coe College. She is working toward her doctorate in Gifted Education. A Nationally Board Certified Chemistry teacher, she coaches six different academic teams, including her science bowl team, which has been together for four years. Outside of school, she enjoys gardening and spending time with her children, Madalyn (7), Blake (4) and Jack (1).

Team Members: Senior Jeffrey Barnes is taking six Advanced Placement classes, plus a class in matrix theory at the University of Iowa. He plays the flute and piccolo and actively pursues musical activities. He was selected for the Iowa All-State Band this year. He also participates in several academic groups, including math club, Academic Decathlon, Science Olympiad, and the German club. He is a National Merit semifinalist and an AP Scholar with Distinction. He plans to major in computer science with a possible second major in mathematics. Krystal Garringer, a senior, is involved in Academic Decathlon, TEAMS competition, and Quiz Bowl and she is president of her high school chess club. She has also been involved with band activities and plays such instruments as the flute and guitar. Krystal intends to go to Iowa State University and major in chemical engineering. In addition to participating in Science Bowl, senior Aaron McDowell has been in Science Olympiads for three years and Academic Decathlon for two years. Future plans are to attend the University of Iowa with the intended major of biology and minor in computer science. Senior Ashley Noreuil has participated in TEAMS, Science Olympiad, Academic Decathlon and Quiz Bowl as well as Science Bowl. Ashley would like others to know that Science Bowl is the best activity listed. In the past year, she has been elected as treasurer of the National Honor Society. Service projects associated with this role include a book fair, school beautification and volunteering to work for a state representative. After graduating, Ashley will enroll in a four-year college program in mathematics. Armed with a degree in mathematics, she hopes to enroll in another area of higher study, possibly economics. Senior Jake Thomas' favorite subjects are literature, the humanities, economics and U.S. history. His favorite food is spaghetti. Jake is interested in "finding someone he can relate to" and he spends his free time working as the president of the student senate. Jake enjoys long walks on the beach. He likes to stay fit with yoga, rock climbing and cross country. When asked, Jake will confess his childish love of "a night in, The Practice and Ben & Jerry's." Jake plans on attending a four-year college or university.

# West Chester East High School / West Chester, Pennsylvania NOBCChE – Philadelphia Chapter



Left to right: Soham Shah, Karsten Chu, Samantha Simmons, John Stratton, Robert Jefferson, Michael Payton (Coach)

Team Coach: Michael Payton is an educator in the West Chester Area School District. During the past 30 years he has taught American history, sociology, European history, and African American studies. He has lectured and taught enrichment courses and directed workshops in African American History and Studies in high schools and colleges. Mr. Payton is actively involved with many local historical societies in southeastern Pennsylvania. He is also the track coach and the NOBCChE science bowl mentor and coach. At NOBCChE, he has coached seven teams to National Championships.

Team Members: Senior Karsten Chu is currently part of the National Honor Society and a member of the NOBCChE East Team. Robert Jefferson, a senior, is the 2002 -2003 East Student Council president. He is a member of "Who's Who Among High School Students", and the National Honor Roll. Robert's favorite subject is mathematics. Some of his extracurricular activities include indoor and outdoor track, The Black Student Union, NOBCChE, and volunteer work through KARE. Robert will be attending the University of North Carolina at Charlotte this fall majoring in business. His career goal is to become a lawyer. Sophomore Soham Shah is currently part of the National Honor Society. His favorite subjects are science and history. Soham enjoys playing hockey and he is a member of the East tennis team. He is a class officer in the French Society, and a member of the NOBCChE East Team. He is a volunteer for the local hospital and the Red Cross. His hobbies include traveling around the world. Samantha Simmons, a sophomore, is a scholar - athlete. She is very interested in the arts and is planning a career in graphic design. Samantha has participated in the NOBCChE program for three years and is a member of the 2001 NOBCChE Junior National Championship team. She is a member of the girl's basketball, tennis, and track teams at East. She expects to play basketball in college. John Stratton is a junior at East. He is an Eagle Scout and a varsity member of the Academic Competition team, and also captain of the Science Olympiad. John is a licensed ham radio operator and lives on a farm.

## Wichita High School East / Wichita, Kansas Honeywell – Kansas City Plant



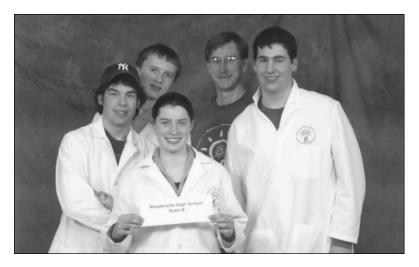
Left to right: Nick Ma, Uta Maeda, Allen Chao, Nancy Cheng, Henry Tran, Joe Chao (Coach)

Team Coach: Art Weigand has a B.S. in Biology and a M.Ed. from Wichita State University. During college he never dreamed he would be an educator. He fancied himself a field biologist of some type. However, after teaching for 2-3 years, he realized he had stumbled upon his true calling. He really loves working with kids. The three scientific discoveries he considers the most important are Watson and Crick's discovery of DNA structure, Darwin's Theory of Natural Selection and the invention of sliced bread. His hobbies include birding, disk golf, playing guitar, hiking and camping.

Team Members: Allen B. Chao is a senior in the International Baccalaureate (IB) program. He is a National Semifinalist in both the Siemens-Westinghouse and Intel Competition and a National Qualifier in the USAMO. Allen is President and Founder of his school's Science Club—a school-wide consortium for all math and science-related events. Allen also serves as President of NHS. He has been Class Representative/Secretary in Student Government for all four years. Allen is also active in Spanish NHS, SADD, Interact, and Spanish Club. Since his freshman year, Allen has volunteered twice a week at his former middle school as Coach of their state-championship MathCounts team. Nancy Cheng is a senior who enjoys playing tennis, Scholars' Bowl, piano, and violin, currently serving as concertmaster of the Wichita Youth Symphony. In 2002, she was named a national winner of both the Discover Card Tribute Award and the Young Naturalist Award and spent last summer conducting cancer research at Cornell University. Nancy is also Founder and Chartering President of Wichita's first Interact Club. She is graduating as a valedictorian and will enter Harvard this fall with a concentration in biology. Nicholas Ma, a senior, is currently a National Merit Finalist, and has been selected as a Presidential Scholar candidate. Nicholas' favorite subjects are mathematics and sciences. He is a two-time qualifier for the USA Math Olympiad, earning honorable mention in 2002. His extracurricular activities include math and science competitions, Scholars Bowl, and Science Olympiad. Nicholas is a member of Science Club, NHS, and Spanish NHS. He volunteers as a Big Brother and helps coach a local MathCounts team. Nicholas' major and college are undecided, but he hopes to include mathematics as part of his collegiate study. Senior Uta Maeda is an IB Diploma Candidate, and her favorite subjects are math and biology. Her recent honors include being named a National Merit Finalist and the State Winner in the 2002 National History Day Contest. She serves as the Vice President of the National Honor Society, and is active in her community as the President of the Big Brothers Big Sisters Regional High School Council. Uta enjoys playing golf as well as the piano and violin. She plans to pursue a career in medicine in the future. Even as he continues to age, senior Henry Tran retains much of his childhood curiosity. Henry has focused his interest towards one career option—study of the life sciences. Throughout high school, Henry has strengthened this passion in activities such as Science Olympiad, E4 Consortium, and Math and Science Club. However, despite being a "core" science student, He has also immersed himself in the arts. He has played the viola for nine years and is a member of the Wichita Youth Symphony. He enjoys computer graphic design and reading in his free time.

# SCIENCE TO THE CORE

## Woodinville High School / Woodinville, Washington Bonneville Power Administration



Left to right: Bryan Cattle, Kevin Dick, Joanne de Mars, Bob Spencer (Coach), Jay Strode

*Team Coach*: **Bob Spencer** has developed and led the development of several Energy, Industrial and Medical products over a 30-year career. He has a B.S. in Chemical Engineering from Caltech, and has successfully avoided letting that limit the scope of his interest and involvement. He has been involved in work with high school students in Science and Math clubs and competitions for four years. He is excited and encouraged to be involved with the people who will soon be fixing all his mistakes. Good luck!

Team Members: Bryan Cattle is a senior who enjoys science, snowboarding, messing with electronics, making movies, and playing in a rock band. This is his second trip to Nationals. Over the last two summers he has had the opportunity to work in a nanotechnology laboratory at the University of Washington, an experience that left him with several published scientific papers to his credit and contemplating a possible career in chemistry. He is active in both school and outside activities including National Honor Society; Math, Science, and Opera clubs; and a variety of volunteer organizations. Next year he will attend Princeton University to pursue a degree in science and international affairs. Joanne de Mars is a senior who likes to learn about history, science, and music. After school, she takes private cello intruction, and is involved in Chamber Music and the Seattle Youth Symphony. Joanne also enjoys mountain biking, cross country skiing, and swimming. She volunteers as a coach for Special Olympics swimming, and also plays bars in a church band. In addition to having a fond interest in science, physics in particular, junior Kevin Dick is deeply fascinated with mathematics. He is Vice President of his school's Math Club and competes frequently. Kevin has several medals and awards from both regional and state competitions. Also a member of the National Honor Society for five years, Kevin has assisted his elementary school's Math and Broadcasting clubs, among other things. In his free time he enjoys coding in C++ and writing poetry – his poetry was featured in a local library group's collection. Jay Strode, a senior, has been involved in Science Club since seventh grade, and has won awards in Science Olympiad, Oceanography Bowl, and Techno Bowl in addition to Science Bowl. Science and history are his favorite subjects, and he also participates in Knowledge Bowl and various math competitions. He enjoys wasting time on the computer, and playing strategy games such as Magic: the Gathering with friends at Woodinville High School's Game Club, which he helped to create. He is planning on majoring in computer science at Cal Poly San Luis Obispo.